

# Boosting Bilateral Trade Between Turkey & US

Final Report

AUGUST 2019



# Executive summary (I/III)



The bilateral trade in goods between Turkey and the US have significantly grown and reached \$23 billion in 2018. However, existing state of the global trade and Turkey-US bilateral relations indicate a need for multi-front effort to reach target levels



Detailed analyses and expert interviews identify multiple opportunities for Turkey within the current global trade context, especially from the developments in US-China trade relations



As observed in other success stories, Turkey needs to focus on key sectors where it has comparative advantage and transversal levers to facilitate trade and investment

# Executive summary (II/III)

We have reviewed all sectors and selected 8 key sectors with the highest upside impact:



Automotive and parts

- Potential in auto parts (esp. aftermarket), and partial potential in buses & coaches, and LCV<sup>1</sup> segments.
- The real opportunity in automotive likely to come with the developments in US-China trade relations



Textile & Apparel

- Knitted and non-knitted apparel, home textile and non-woven segments promise significant opportunity for Turkey
- Turkey cannot compete solely based on costs. Turkey should invest in design, brand imaging, marketing of social resp.



Jewelry

- Turkey has significant competitive advantage in gold jewelry
- Better marketing via using digital channels, and providing more transparency required (e.g. ethical sourcing)



Civil aerospace

- Turkey's capability is largely limited to parts and components, and not at the level of systems and complete aircrafts
- Besides attracting FDI & JVs, long-term strategy in R&D, in education & skilled labor, and in Industry 4.0 required



White goods

- Significant opportunity to capture Chinese market share in refrigerators and air conditioners
- Product matching to meet technical standards and US consumer demands should be supported via targeted incentives



Building materials

- Potential in cement will be driven by predicted infrastructure boom in the US
- Opportunity in ceramic tiles by capturing Chinese share of wallet, and from Europeans via better design and branding



Furniture

- Opportunity to capture Chinese share of wallet, needs to be complemented with better design and branding



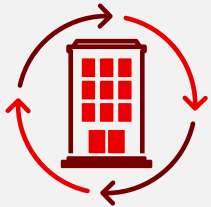
Travel & tourism

- The sector within service group with significant potential upside
- Upside impact is largely dependent on multi-front effort in country PR

1. Light commercial vehicle

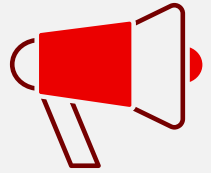
# Executive summary (III/III)

We have identified the top transversal levers with highest impact:



Business  
Facilitation

- Improving business services support between Turkey and US
- Extending trade centers geographically and functionally, enhancing commercial service representation, and encouraging Eximbanks of both countries for further collaboration
- Establishing a task force to improve business facilitation services is essential for quick wins



Country PR

- Improving the image of their respective nations and national brands through strategically designed country PR campaigns will be vital (esp. for Turkey)
- Initiating contacts and improving Turkey's image in safety & security in the US
- Launching a targeted campaign utilizing digital channels and brand advocates to improve country image



FDI & JV

- Further collaboration is needed to attract foreign direct investment (FDI) and facilitate the formation of joint ventures (JVs) between American and Turkish companies
- Addressing questions and concerns of existing and potential American investors in Turkey will be key
- Encouraging the Turkish business community to invest more in the US should be part of the strategy
- Setting an action group to prepare a holistic FDI & JV strategy and to promote Turkey as a hub for production and R&D investment center in key sectors

We have identified immediate actions for the high priority areas  
The details of the action plan can be found in the document



# Agenda



Turkey-US trade and other countries' success stories



Findings of deep-dives for selected sectors and levers for Turkey



Findings of deep-dives for selected sectors and levers for the US



Implementation plan



# Project results are built on several resources and detailed analyses



We have leveraged 75+ reports with significant support from key stakeholders and business associations

Not comprehensive



Reports on TR-US  
bilateral trade



Sectoral analysis  
reports



Reports on  
transversal levers



BCG reports

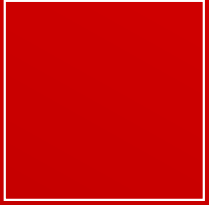
We have carried out 40+ belief audits with companies, business associations and government agencies

### Companies in deep-dived sectors



### Business associations and government agencies





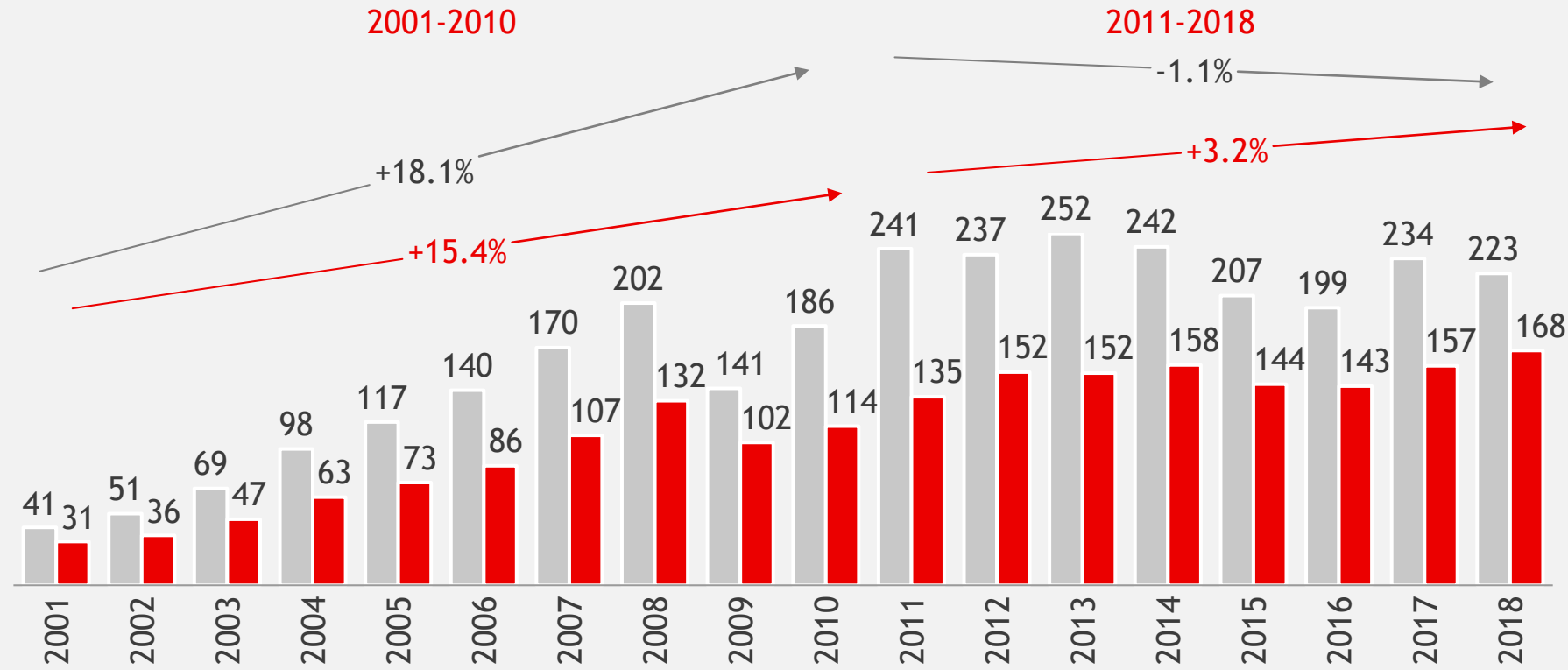
# Turkey-US trade and other countries' success stories

# Turkey managed to increase its trade volume significantly

Trade volume growth slowed down since 2011 but export growth exceeded imports

Turkey foreign trade balance (\$B)

Imports Exports



CAGR<sup>1</sup>  
2001-2018

10.4%  
import

10.3%  
export

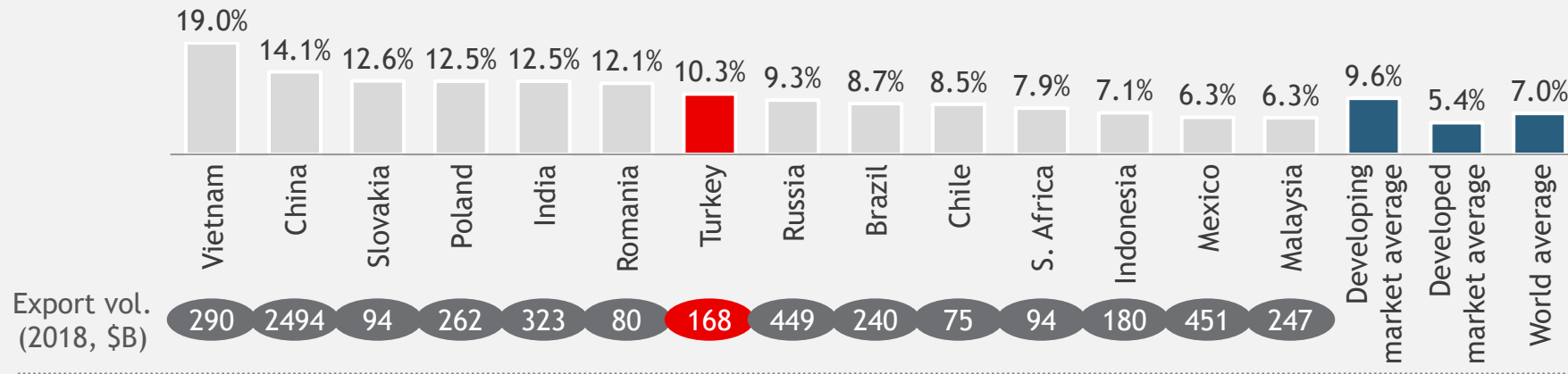
10.4%  
trade vol.

1. Compounded annual growth rate  
Source: International Trade Centre; BCG analysis

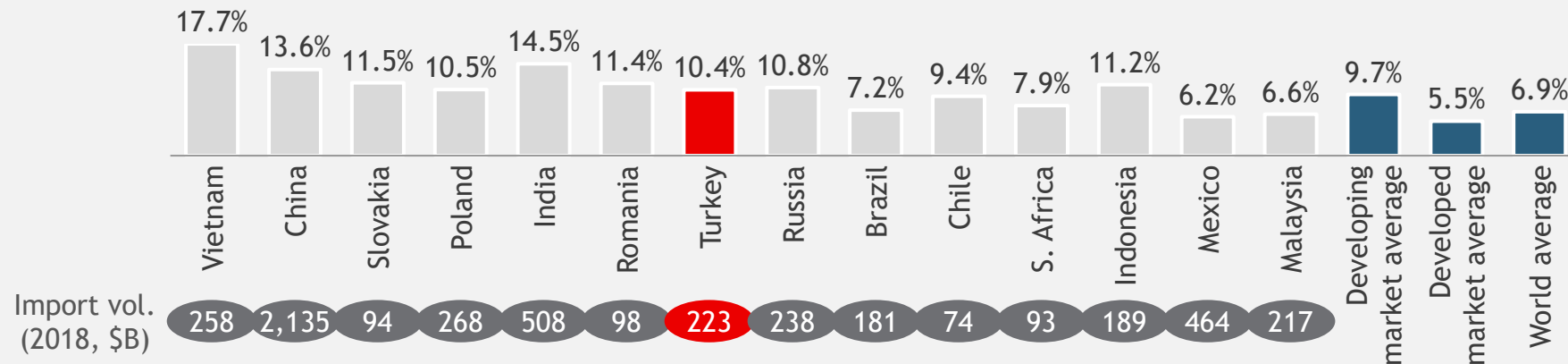


# Turkey outperformed many peer benchmark countries both in exports and imports

2001-2018 CAGR<sup>1</sup> of export volumes (%)



2001-2018 CAGR<sup>1</sup> of import volumes (%)



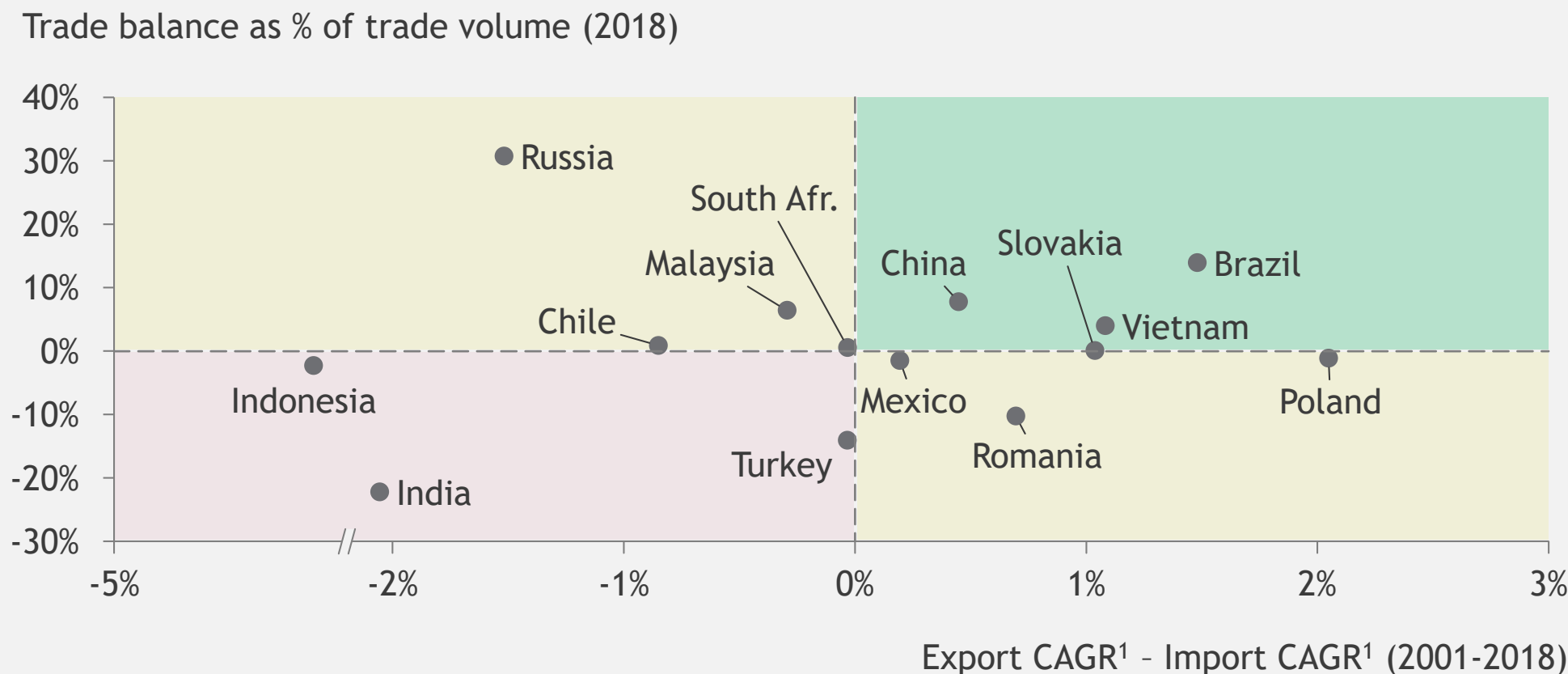
1. Compounded annual growth rate  
Source: International Trade Centre; BCG analysis

## Key insights

- Liberalization of the Turkish market since 1980s led competitive industries to emerge
- Customs Union agreement in 1996 boosted trade and market integration
- Turkey's domestic industries faced and responded **competitive challenges**, and became export-oriented

# However, Turkey's trade deficit persists

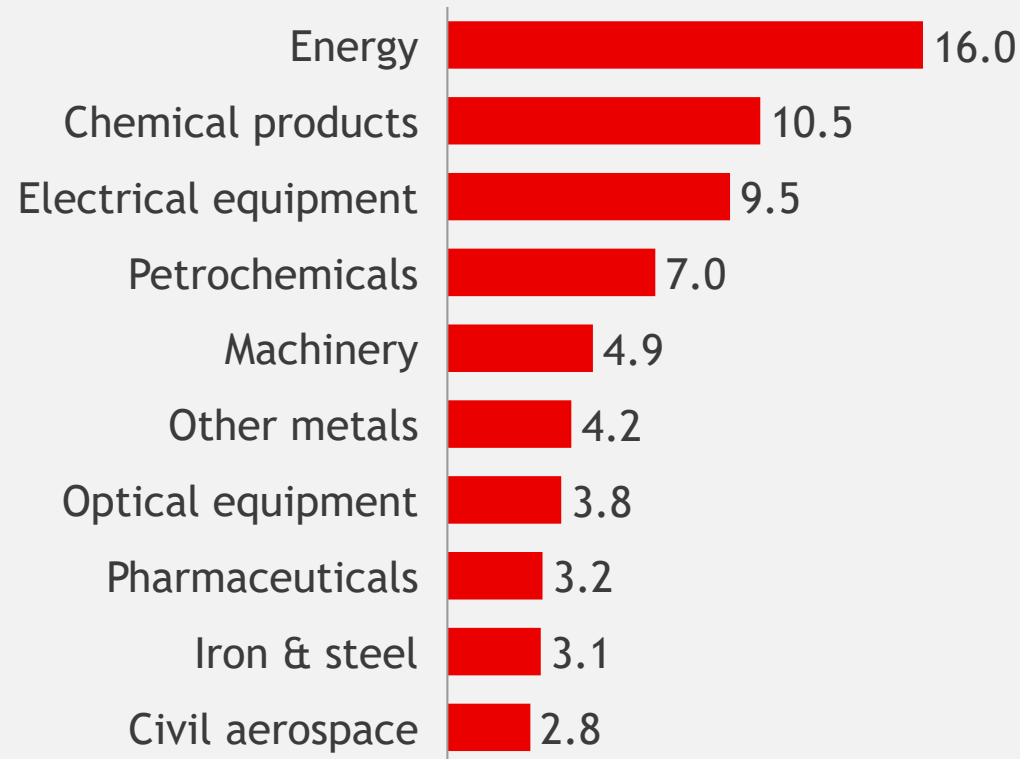
Countries' trade balances and evolution over time



1. Compounded annual growth rate  
Source: International Trade Centre; BCG analysis

# Turkey's competitive and less competitive industries reflect its fundamental economic strengths and weaknesses

Turkey's 2018 **trade deficit** by product category (\$B)



Turkey's 2018 **trade surplus** by product category (\$B)

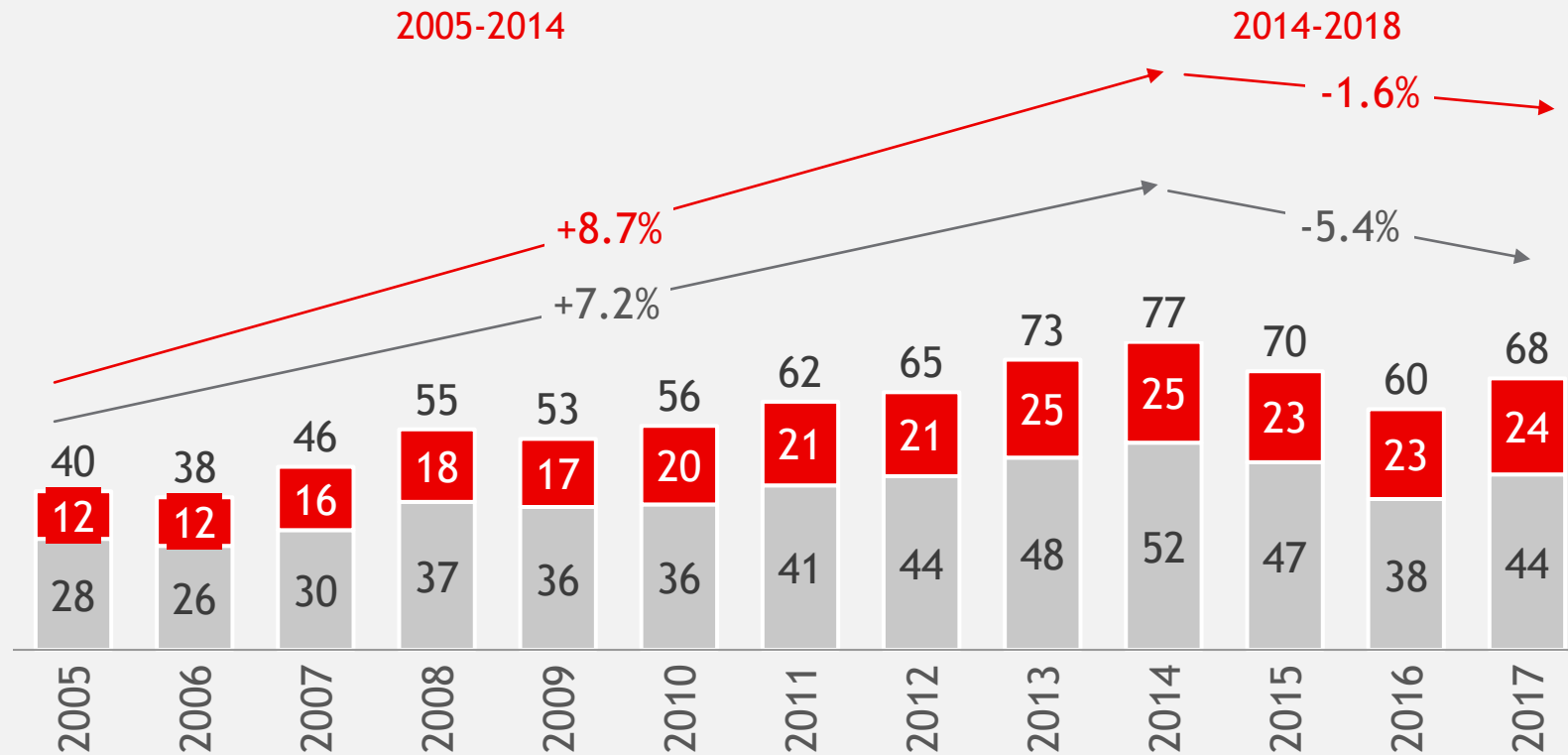


Note: Category "Other" with ~\$30B deficit not shown in the graph  
Source: International Trade Centre; BCG analysis

# Turkey has a trade surplus in services, yet its service trade growth has been much slower than world average

Turkey trade volume (\$B)

■ Import ■ Export



Turkey lagged behind global services trade growth

CAGR<sup>1</sup> 2005-2017

4.6%  
Turkey

6.1%  
Global

~\$68B

Trade vol. in 2018

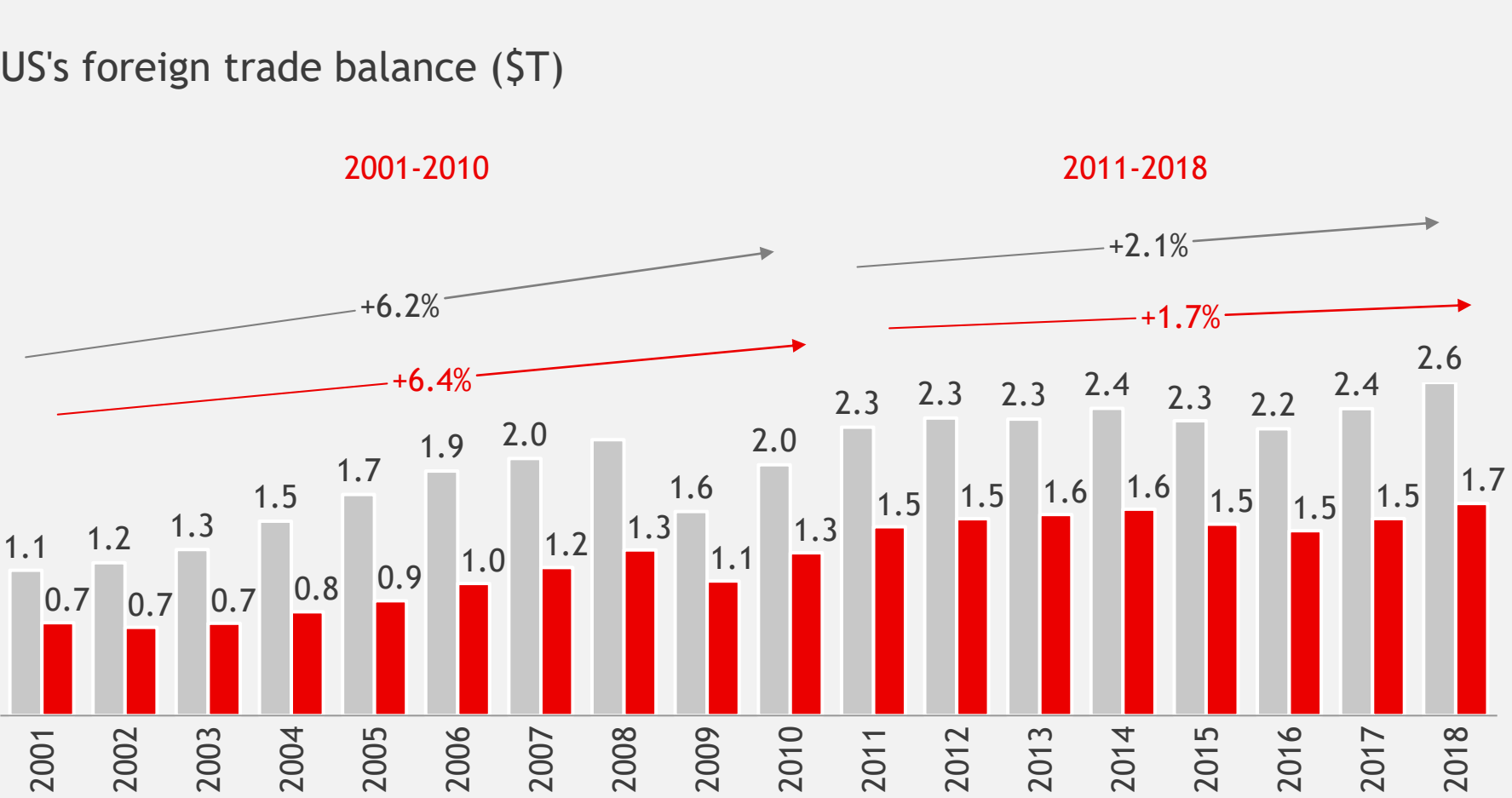
~\$20B

Trade surplus for  
Turkey in 2018

1. Compounded annual growth rate  
Source: International Trade Centre; BCG analysis

# US trade growth also has stagnated in recent years

US's foreign trade balance (\$T)



CAGR<sup>1</sup>  
2001-2018

5.0%  
import

4.8%  
export

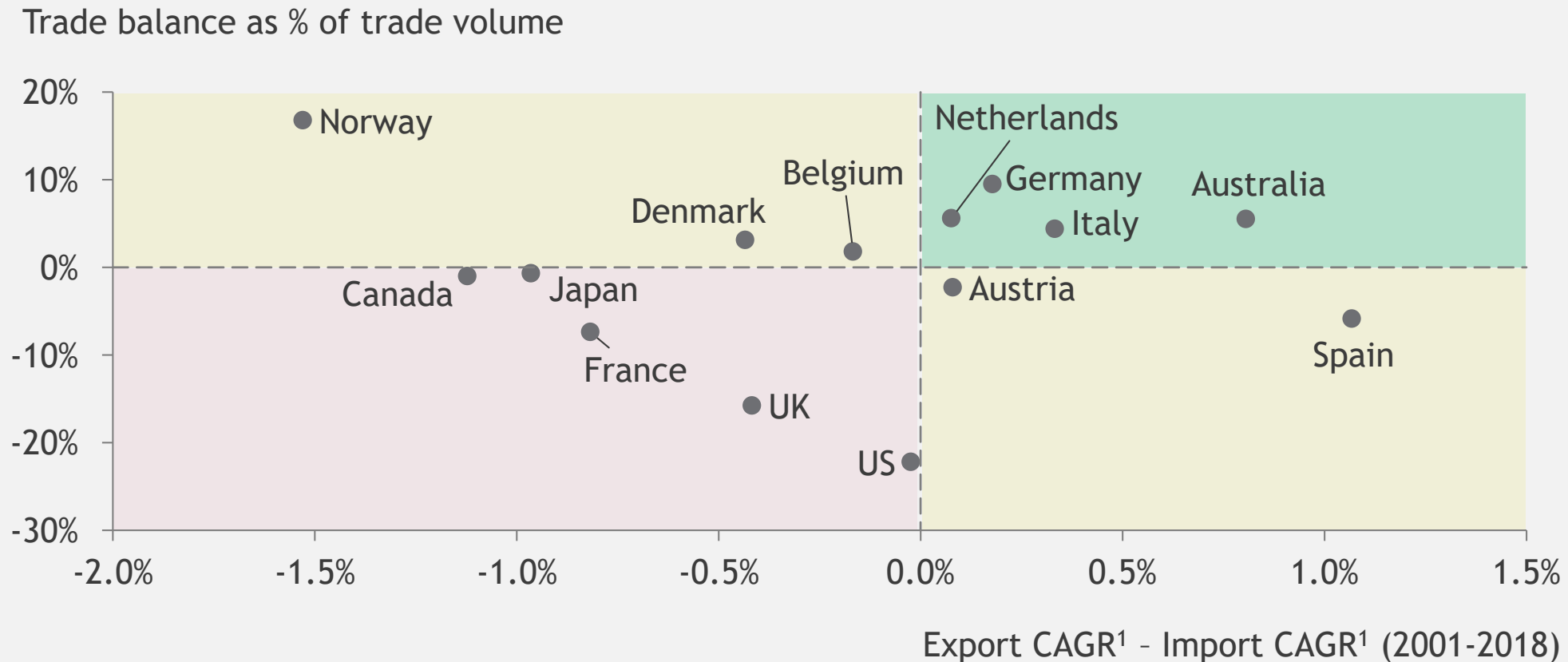
4.9%  
trade vol.

5.1%  
trade deficit

1. Compounded annual growth rate  
Source: International Trade Centre; BCG analysis

# Trade deficit also a persistent problem for the US

Countries' trade balances and evolution over time

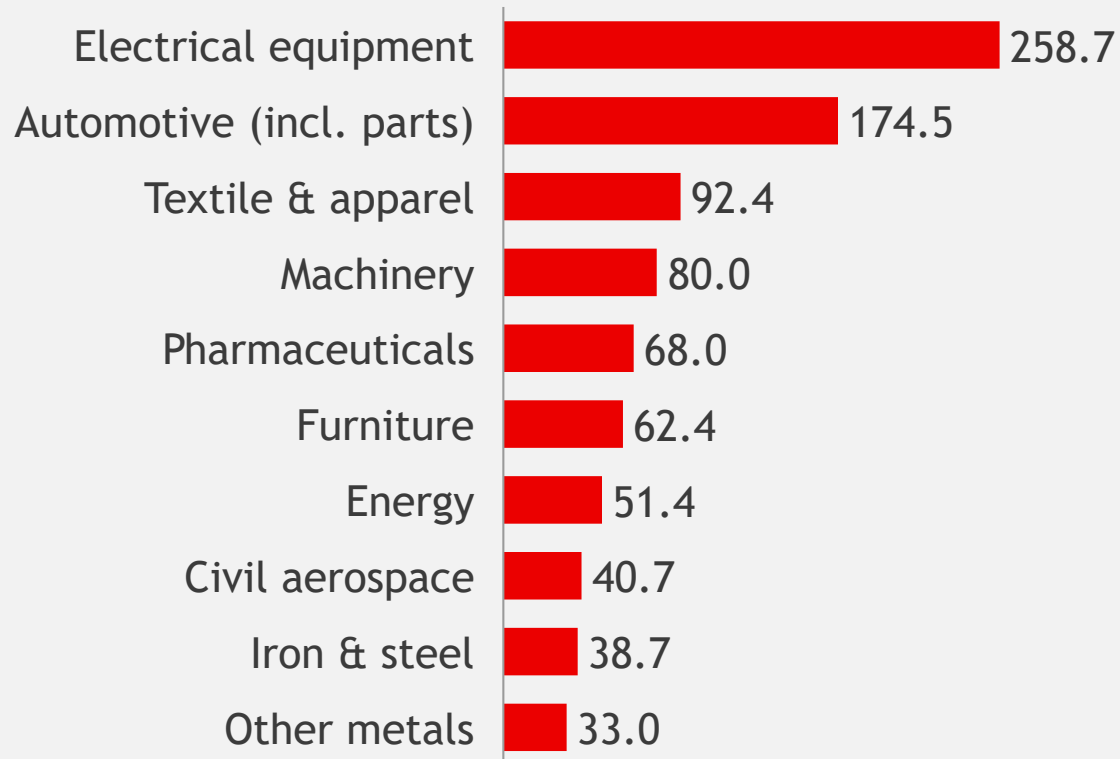


1. Compounded annual growth rate  
Source: International Trade Centre; BCG analysis

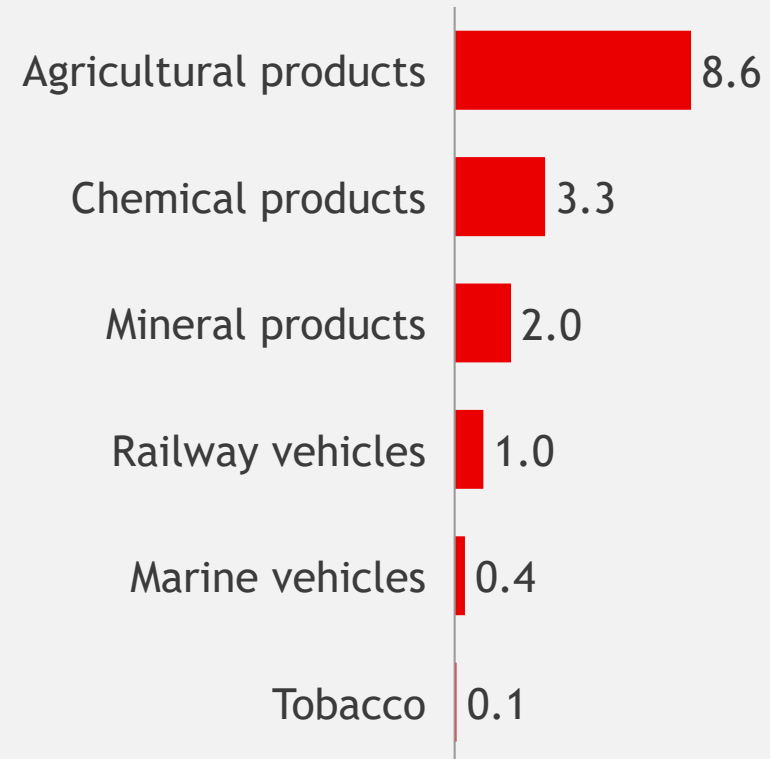


# US not competitive in most industries, very few exceptions

US' 2018 **trade deficit** by product category (\$B)

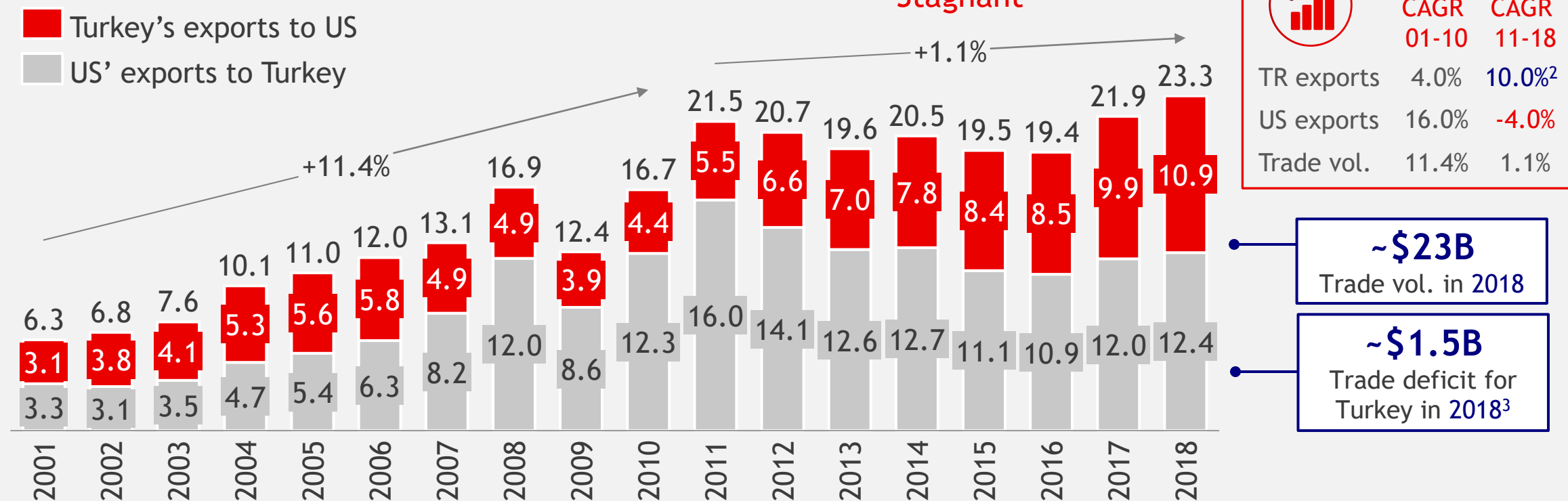


US' 2018 **trade surplus** by product category (\$B)



# Turkey-US bilateral trade volume had grown strongly, protectionism likely to jeopardize further growth<sup>1</sup>

Turkey-US bilateral goods trade volume (\$B)



1. Tariff increases in aluminum & steel, removal from GSP preference and extension of Section 232 to other industries puts a threat to further growth

2. Turkey's export performance have been noteworthy since 2011, with per annum growth rate of 10%, where as US export to TR declined by 4% per annum

3. Turkey is one of the 28 countries that US has trade surplus of \$1 billion or more per annum (2018 figures); US has trade surplus against 113 countries; and deficit against 99 countries

Note: Only import data is used; Trade Map figures

Source: International Trade Centre; BCG analysis








# Significant uplift in bilateral trade requires efforts at multiple fronts

Success stories from peer benchmark countries indicate areas of focus for Turkey to increase its exports to the US



# Success stories indicate clear lessons

## Key takeaways

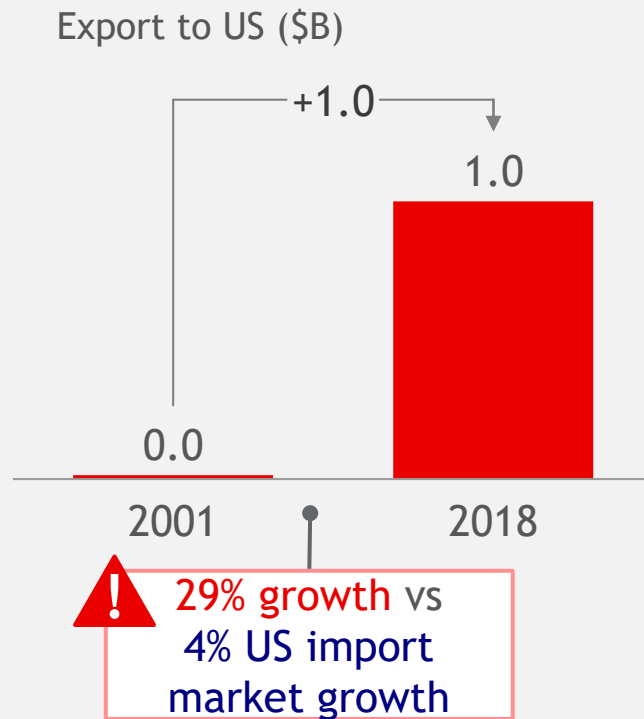
							
	Poland	Slovakia	Vietnam	India	Israel	Switzerland	S. Korea
1 Define and focus on key sectors	✓	✓	✓	✓	✓	✓	✓
2 Know your target market	✓	✓	✓	✓	✓	✓	✓
3 Offer right products	✓	✓	✓	✓	✓	✓	✓
4 Focus on branding and country PR						✓	✓
5 Attract FDI and invest abroad	✓	✓	✓		✓		✓
6 Define your national export strategy				✓			✓
CAGR <sup>1</sup> of exports to the US in selected industry	29%	52%	39%	8%	32%	6%	5%
CAGR <sup>1</sup> of the US' import vol.	4%	4%	3%	2%	2%	3%	3%

Note: CAGRs<sup>1</sup> are for relevant sectors  
 1. Compounded annual growth rate, 2001-18  
 Source: BCG, International Trade Center

# Success Story: Poland has increased its exports to the US by \$1.0B with a sectoral focus and attracting FDI



## Performance overview



Note: Poland's Aerospace US sow = 4%, global sow = 2%  
Source: International Trade Centre; BCG analysis



## Key characteristics

### Polish aerospace industry

- Shift from Soviet orient. since 1990s
- Significant investment from US firms Sikorsky, Pratt & Whitney, Goodrich
- Focus on turbojets parts and helicopter parts
- Over 200 companies and 30K workforce

### Polish Aviation Valley

- Association was established in 2003 by industry players to:
  - reduce costs in the supply chain
  - develop aerospace research and skills

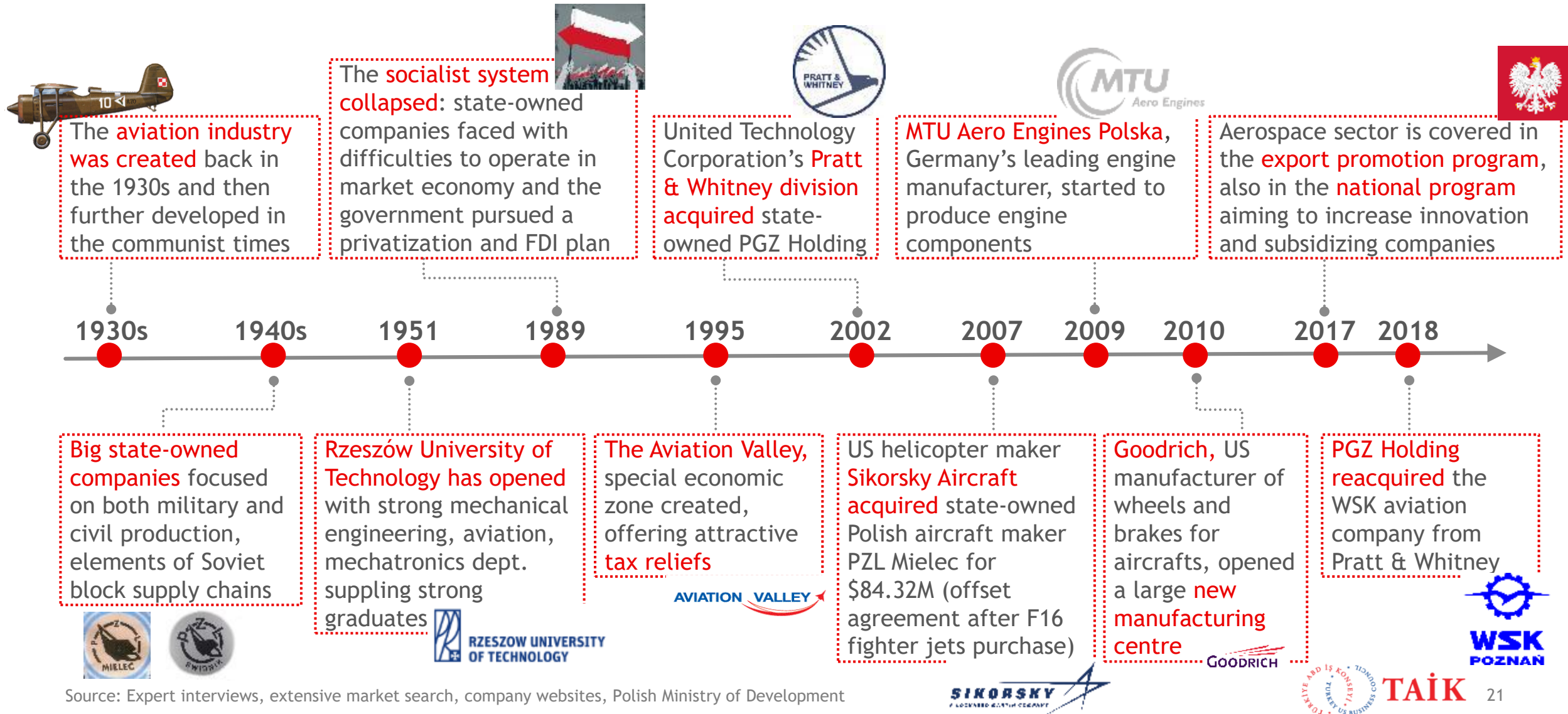


## Key learnings

- ✓ Selection of aerospace as strategic sector by sector players; cooperation among sector players
- ✓ Attracting large international aerospace manufacturers
- ✓ Investment in R&D and public education supported sector growth
  - Aerospace department in universities
  - R&D incentives



# Polish aerospace industry has a long history and a well-developed network



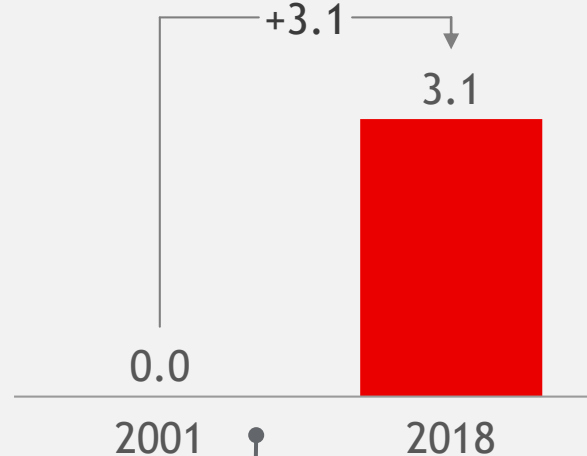


# Success Story: Slovakia has boosted its exports to the US by \$3.1B in automotive and spare parts through integration with global value chains



## Performance overview

Export to US (\$B)



**!** 52% growth vs  
4% US import  
market growth

Note: Slovakia's Automotive US sow = 1%, global sow = 2%  
Source: International Trade Centre; BCG analysis



## Key characteristics

Slovak automotive industry

- Biggest automotive producer per capita (over 1M cars in 2017)
- Four major OEM present (VW, PSA, Kia, JLR)
  - Especially SUV segment by VW
- 300+ suppliers

MNCs move their R&D centers to Slovakia

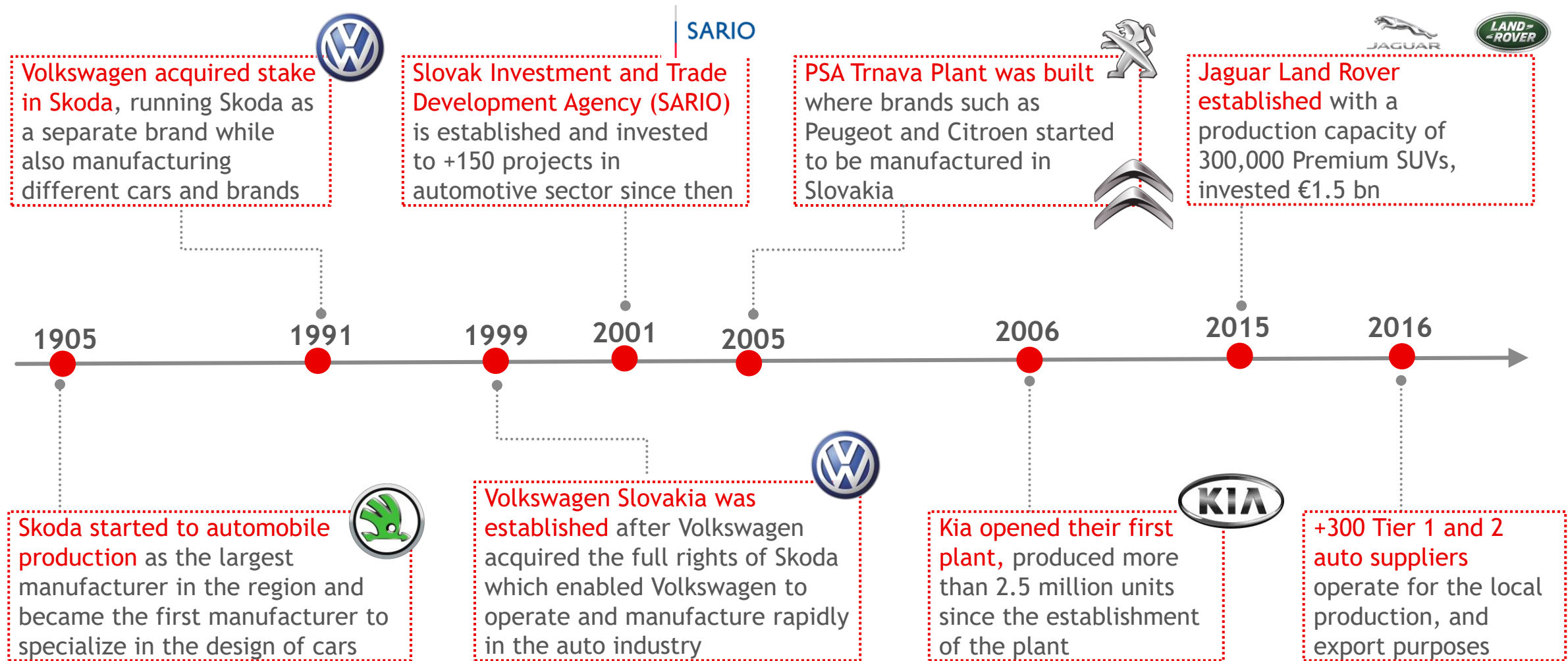
- Technical education, skilled labor force
- Tax incentives (e.g. land acquisition, building costs, equipment, cash grant, tax relief etc.)



## Key learnings

- ✓ FDI attraction and integration with global value chain
- ✓ Ease of doing business and tax incentives -esp. for R&D
- ✓ Long-term investment in education and training
  - Industry & university cooperation
  - Vocational schools

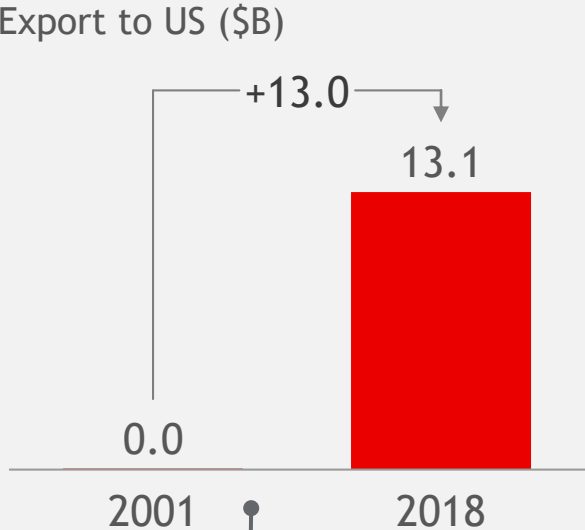
# Slovakia Automotive sector attracted investors and developed the industry



# Success Story: Vietnam had a massive \$13.0B uplift in its Textile exports to the US, driven by its cost competitiveness



## Performance overview



**! 39% growth vs 3% US import market growth**

Note: Vietnam's Textile US sow = 11%, global sow = 5%  
Source: International Trade Centre; BCG analysis



## Key characteristics

### Vietnam Textile industry

- Low manufacturing costs has enabled the country to attract foreign businesses
- A growing number of businesses have relocated their business from China to Vietnam in an attempt to escape from the rising costs
- An increase in the complexity of the regulatory environment has also effected the businesses decisions to relocate in Vietnam where the regulatory environment in much simpler

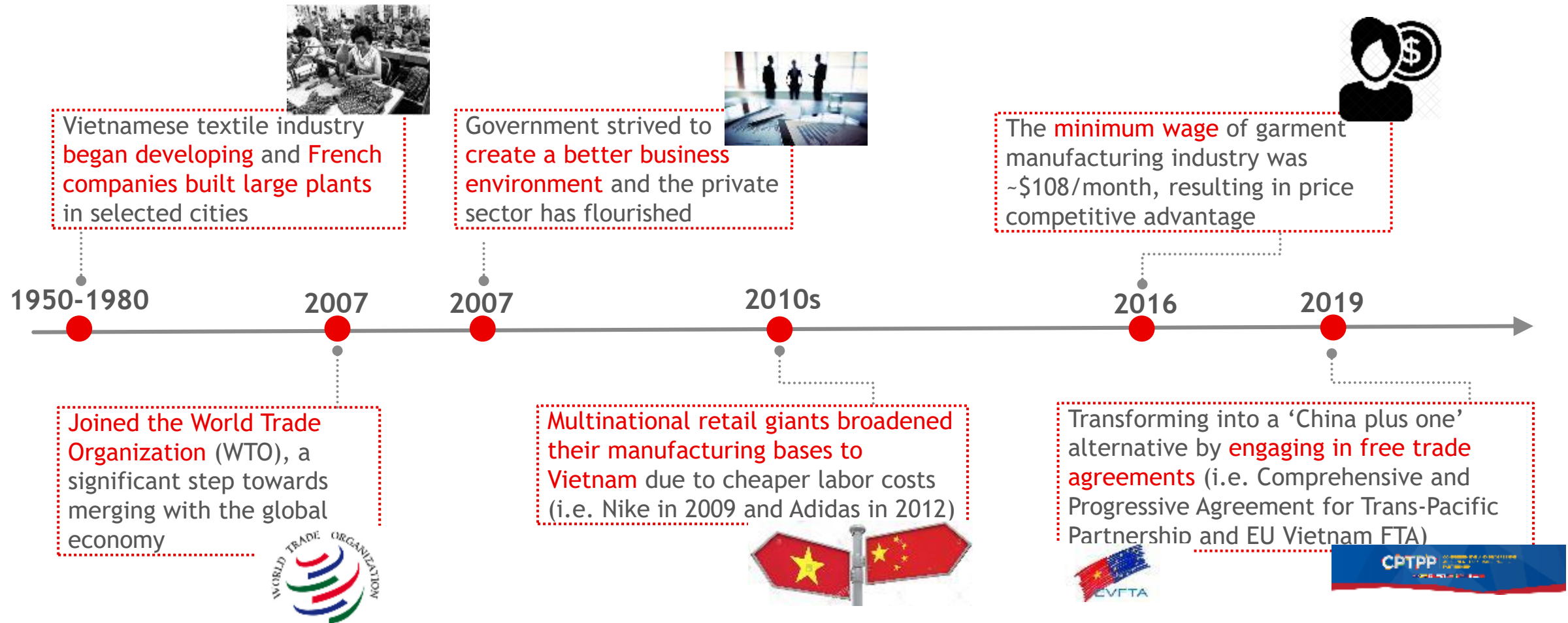


## Key learnings

- ✓ Attracting FDI with cost advantages (e.g. stealing from China) and ease of doing business
- ! Newcomers threaten cost position (e.g. Cambodia and Bangladesh)
- ✓ Vision to upgrade in value chain in textile (e.g. brand creation etc.)



# Vietnam becoming a strong textile manufacturer and exporter for the last decade

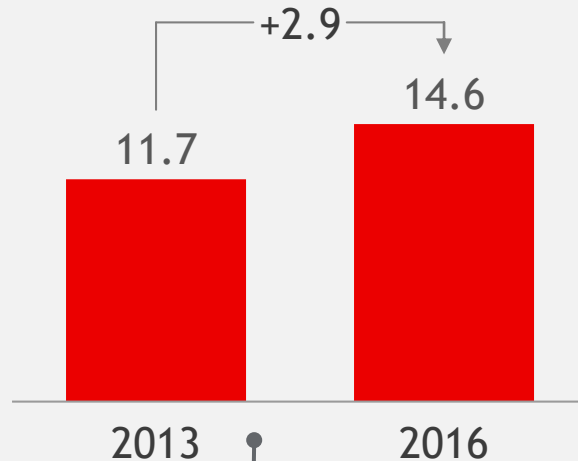


# Success Story: India has continued to further grow its exports to the US in telecom, computer and information services



## Performance overview

Export to US (\$B)



! **8% growth** vs  
**2% US import**  
**market growth**

Note: India's ICT US sow = 40%, global sow = 11%  
Source: International Trade Centre; BCG analysis



## Key characteristics

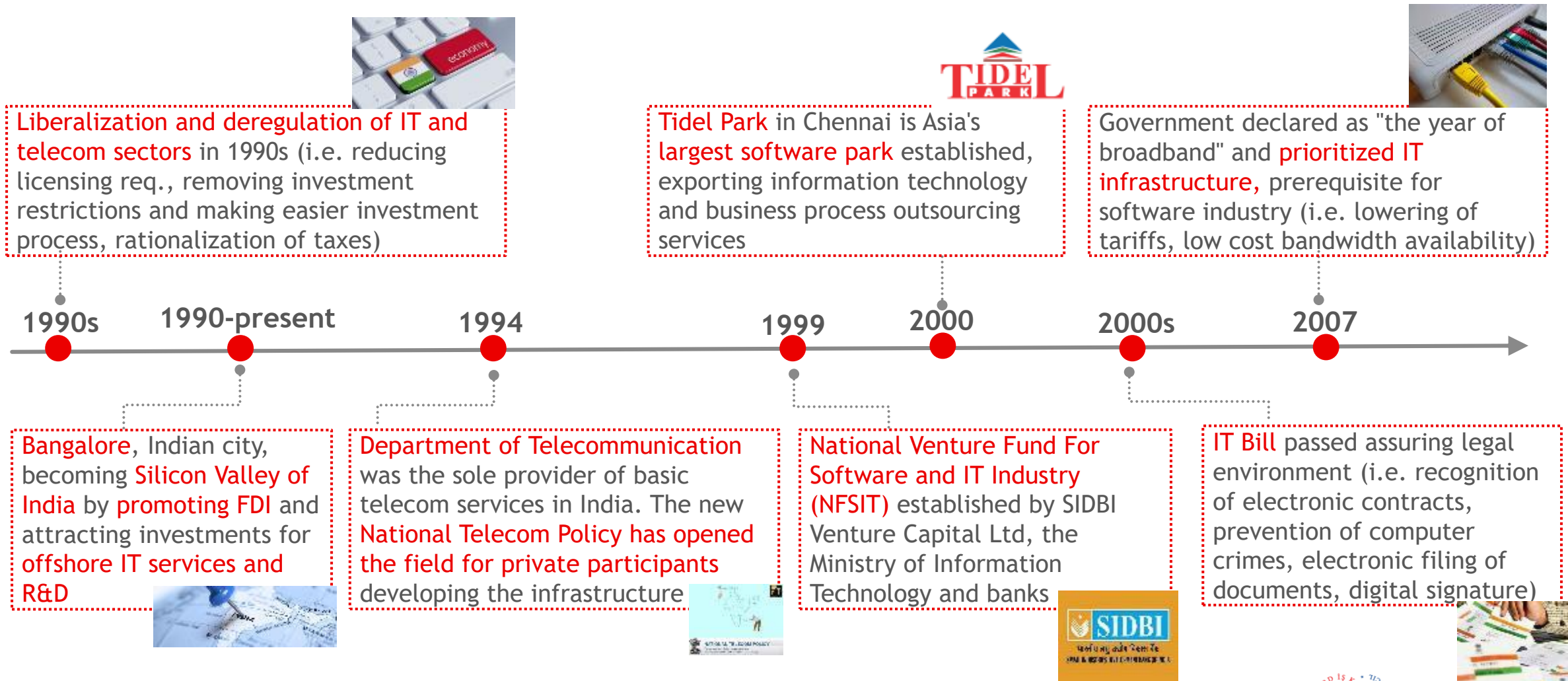
- Liberalization and deregulation of IT and telecom sectors in 1990s
- Prioritization of IT sector, prerequisite for software industry
- Education system providing skilled and inexpensive labor force with English proficiency
- Assuring legal environment
- Promotion of FDI and attracting investments for offshore IT services and R&D
- Established a National Venture Capital Funding by the Ministry of IT and banks to invest in the software and IT industries



## Key learnings

- ✓ Long term capability building especially in labor force
- ✓ Governmental initiatives, especially to promote R&D and attract FDI
- ✓ Ease of doing business contributed trade growth

# Indian computer services industry became strong with government actions



Source: Expert interviews, extensive market search, company websites, Indian Ministry of Information Technology

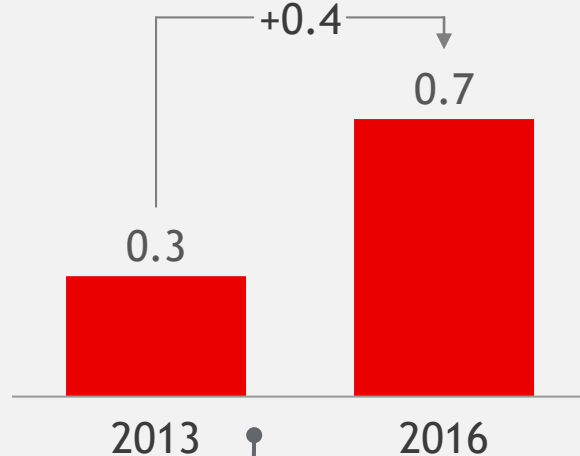


# Success Story: Israel has more than doubled its telecom, computer and information services exports to the US in 3 years



## Performance overview

Export to US (\$B)



**! 32% growth vs 2% US import market growth**

Note: Israel's ICT US sow = 2%, global sow = 2%  
Source: International Trade Centre; BCG analysis



## Key characteristics

### Israel ICT Industry

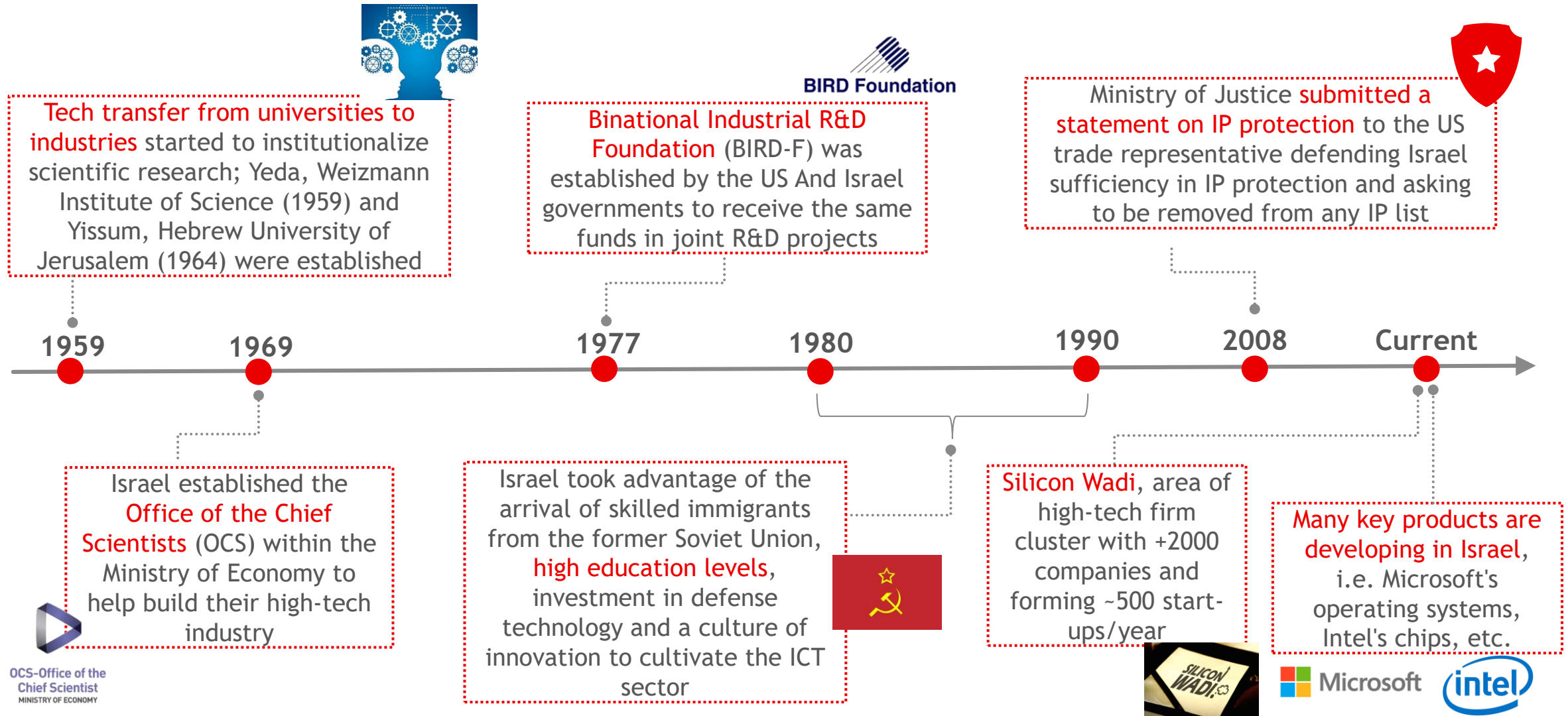
- Israel's focus on defense sector led to defense-related research and the development of the computer services
- Multiple gov. initiatives taken, e.g:
  - Ministry of Justice submitted a statement on Intellectual property protection to US which has shown U.S. that Israel has sufficient precautions, thus increasing ease of doing business
- Bilateral agreements have also enabled U.S. and Israel companies to receive matching funds and work together on R&D projects



## Key learnings

- ✓ Long term capability building via governmental initiatives - especially to promote R&D and attract FDI
- ✓ Ease of doing business has increased with IP protection, which contributed trade growth

# Israel ICT sector built on defense and key IT products for US companies

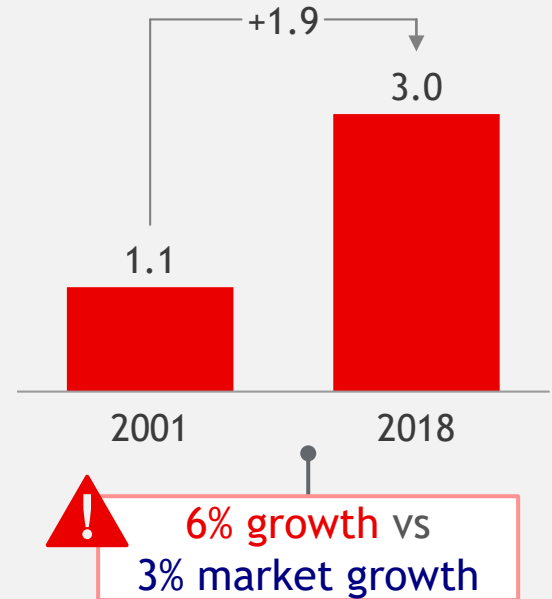


# Success story: Switzerland has tripled its watches exports to the US with a clear focus on branding and country PR



## Performance overview

Export to US (\$B)



Source: International Trade Centre; BCG analysis



## Key characteristics

Swiss watch industry

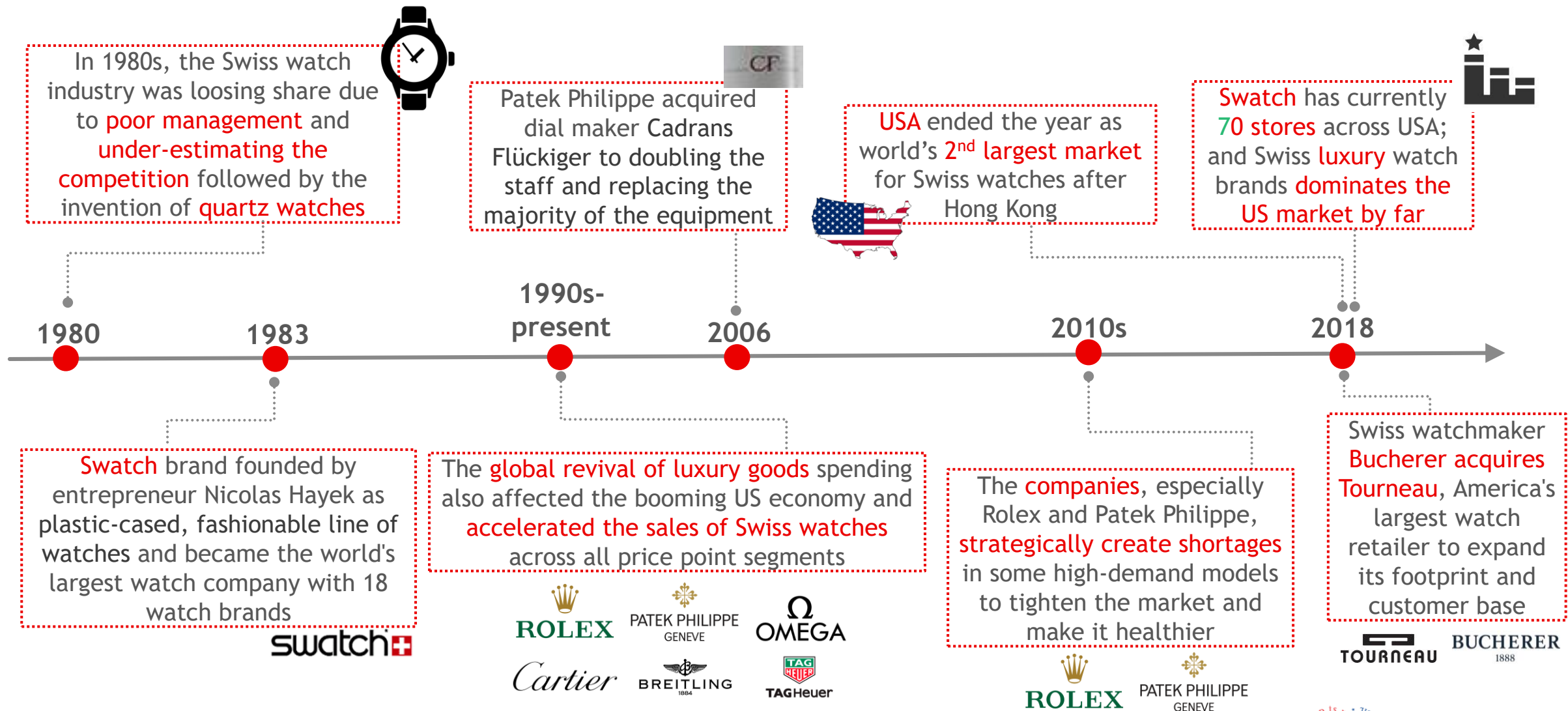
- Switzerland is associated with cleanliness, reliability, precision and quality; thus perceived as the best watch producer
- Watch became the accessorize considered as a piece of jewelry, a fashion accessory and a status symbol
- With the help of booming US economy and general revival of luxury goods spending, USA became the 2<sup>nd</sup> largest export country for Swiss watches



## Key learnings

- ✓ Branding of companies is key to increase the product demand
- ✓ Country image and PR help in increasing the sales; "Swiss Made" label positively impact the industry

# Switzerland watch sector enjoyed the country reputation and branding

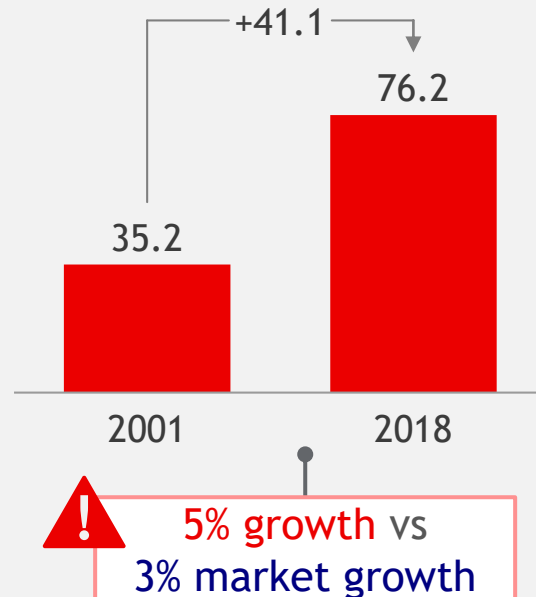


# Success story: South Korea's total exports to the US have grown by more than \$40B with a national export strategy



## Performance overview

Export to US (\$B)



Source: International Trade Centre; BCG analysis



## Key characteristics

South Korea has built its economy across all industries with government strategic plans:

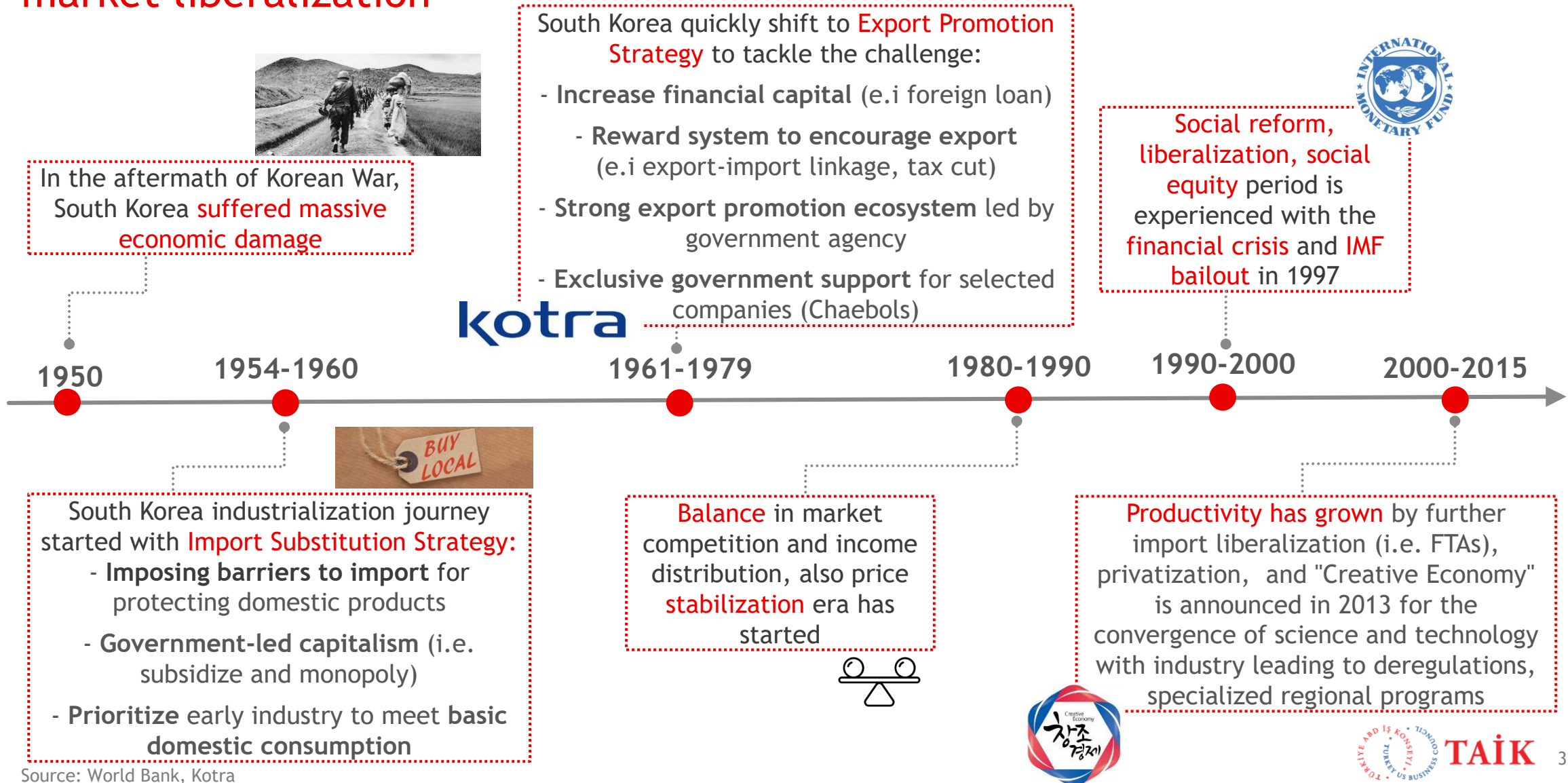
- Starting with export-led industrial development by import substitution
- Followed by increasing competitiveness with guided capitalism for Chaebols and internationalization
- Updated with productivity growth especially in encouraging new businesses with "Creative Economy"



## Key learnings








- ✓ Government guidance is key to develop economy and industries
- ✓ Substitution and incentives should be applied for the right direction

# South Korea planned strategic expansion strategy and industrialization before market liberalization



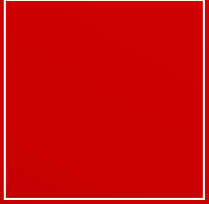
# Recall: Success stories indicate clear lessons for Turkey to focus on key sectors and transversal levers

## Key takeaways

							
	Poland	Slovakia	Vietnam	India	Israel	Switzerland	S. Korea
1 Define and focus on key sectors	✓	✓	✓	✓	✓	✓	✓
2 Know your target market	✓	✓	✓	✓	✓	✓	✓
3 Offer right products	✓	✓	✓	✓	✓	✓	✓
4 Focus on branding and country PR						✓	✓
5 Attract FDI and invest abroad	✓	✓	✓		✓		✓
6 Define your national export strategy				✓			✓
CAGR <sup>1</sup> of exports to the US in selected industry	29%	52%	39%	8%	32%	6%	5%
CAGR <sup>1</sup> of the US' import vol.	4%	4%	3%	2%	2%	3%	3%

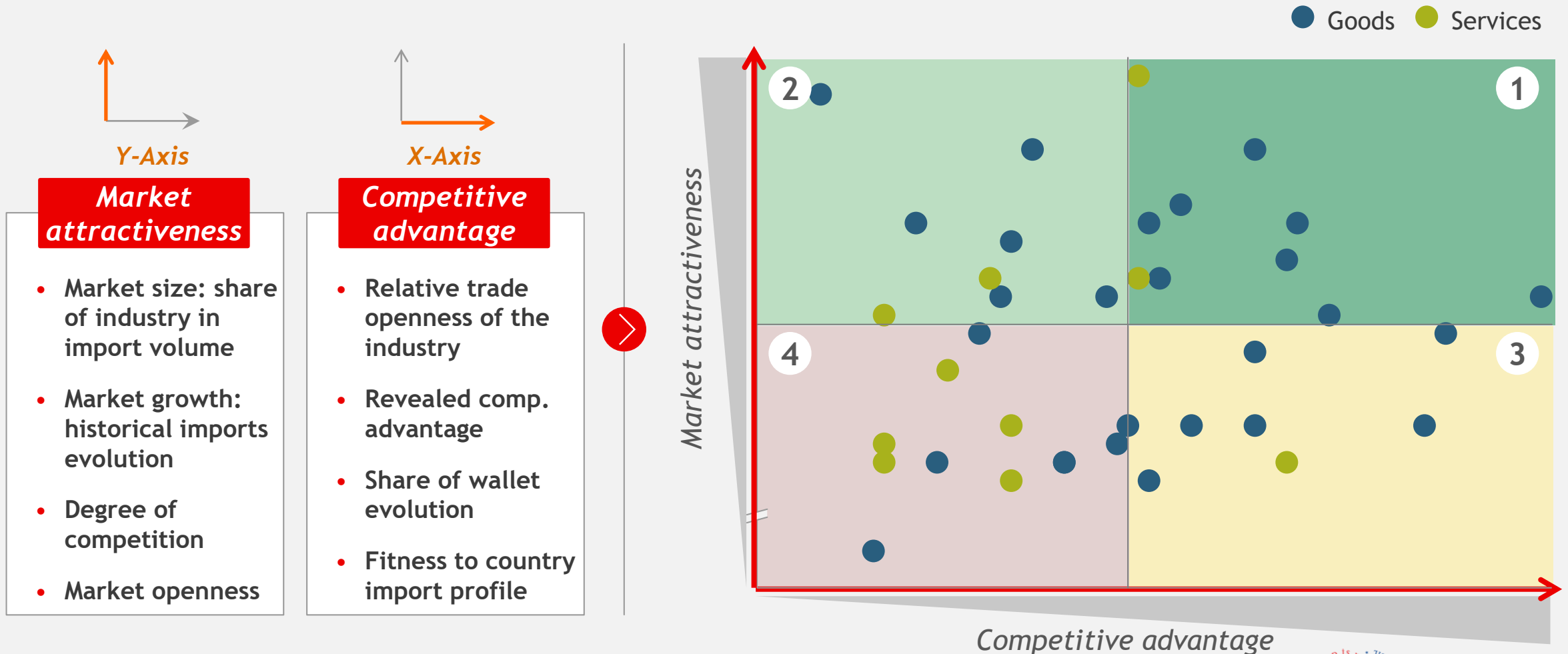
Note: CAGRs<sup>1</sup> are for relevant sectors  
 1. Compounded annual growth rate, 2001-18  
 Source: BCG, International Trade Center





# Deep-dives for selected sectors and levers for Turkey

# We utilized a comprehensive approach to assess market attractiveness and competitiveness at industry level



# Multiple parameters leveraged to capture key traits along each dimension

## Market attractiveness parameters



Market size

Share of industry's imports in total US imports



Market growth

2011-2018 CAGR of US imports in the industry



Degree of competition

Herfindahl-Hirschman index measuring the share of top 10 origin countries for US imports



Ease of market capture

Shift in sourcing base over 2011-2018 measured through absolute changes in market shares of top exporters

## Competitive advantage parameters



Relative trade openness

Difference of tariff applied to imports from Turkey than the average US tariff for industry



Revealed comparative advantage

Ratio of industry's share in Turkey's exports to its share in global exports



Share of wallet evolution

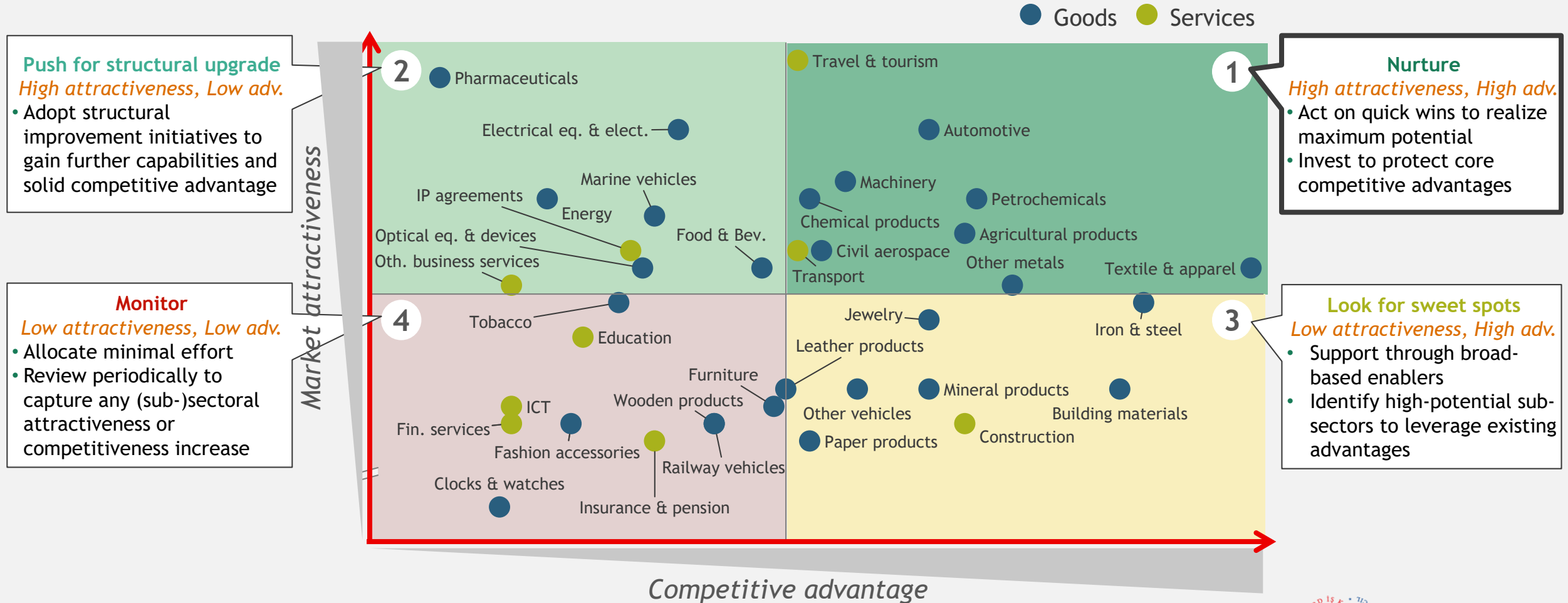
Change in Turkey's share of wallet in US imports over 2011-2018 period



Fitness to US' import profile

Comparison of unit value of Turkey's exports to unit value of US' imports

# Turkey perspective: Industry assessment reveals 4 groups of industries with different needs and priorities











# 8 industries with vast potential to uplift Turkish exports

## Main criteria for industry selection

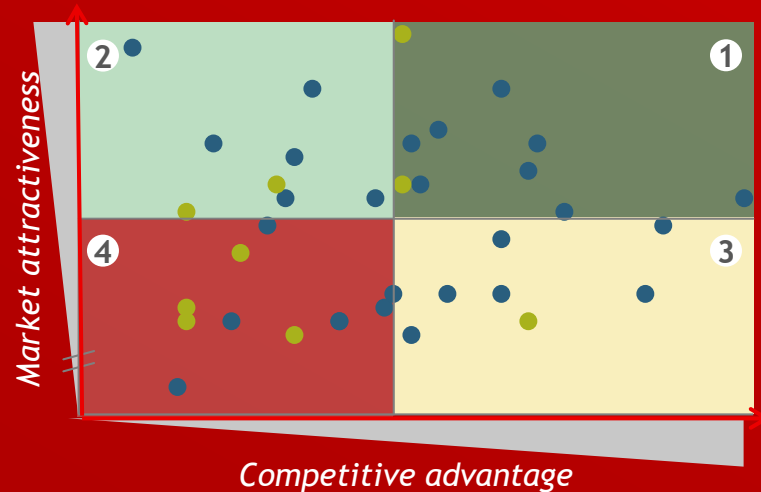
- **High competitive advantage**
  - Industries where Turkey has already built capabilities are the primary focus
- **High market attractiveness**
  - Industries with stronger appetite for import as well as attractive competitive environment are more favorable
- **Large market size**
  - Industries with larger market size are more favorable to form a higher base and thus drive tangible uplift
- **Favorable trade environment**
  - Industries with less complex trade environment are more favorable

## Recommended focus industries<sup>1</sup>

-  Automotive (incl. parts)
-  Textile and apparel
-  Jewelry
-  Civil aerospace
-  White goods
-  Building materials
-  Furniture
-  Travel and tourism

1. Other opportunity areas also listed in the document

We detailed  
selected sectors  
and transversal  
levers to  
increase Turkish  
exports to the US



## Sectors



Automotive  
(incl. parts)



Textile &  
apparel



Jewelry



Civil  
aerospace



White  
goods



Building  
materials



Furniture



Travel &  
tourism

## Transversal levers



Business  
facilitation



Country  
PR

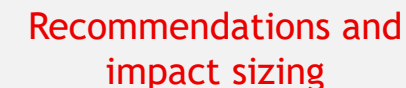
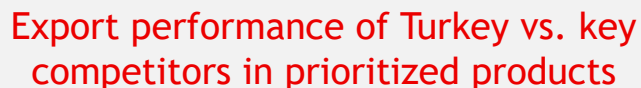
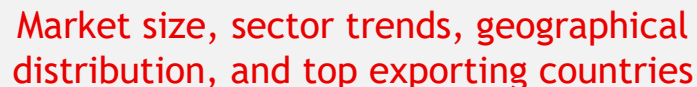
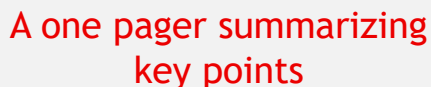


FDI and Joint  
Ventures



Logistics

## 1



TAK



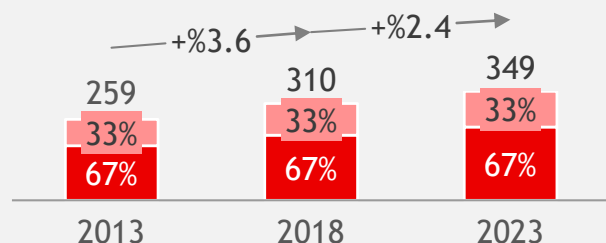


# Automotive (incl. parts): Significant upside potential in parts, buses & coaches, and light commercial vehicles

## Market overview

US automotive imports (\$B)

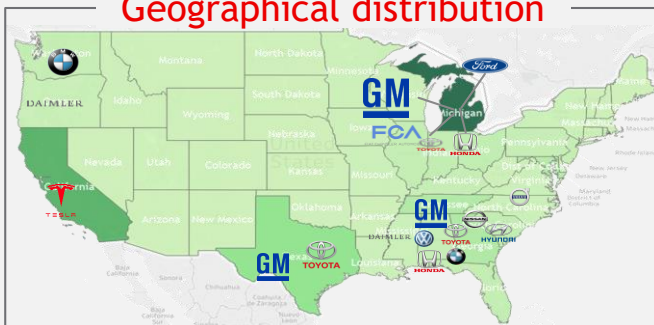
Parts Vehicles



## Top producers



## Geographical distribution



## Product prioritization<sup>1</sup>

Prioritized segments:

- Parts and accessories for vehicles
- Buses & coaches (Passenger vehicles,  $\geq 16$  persons)
- Light commercial vehicle

Selected products' exports to the US (\$B)

Key strength

China	15.5	Economies of scale
India	2.9	Gov. support
Taiwan	1.9	R&D cap.

## Main opportunities & risks

- 🔑 Capture SoW from China in auto parts
- 🔑 Increase exports in selected markets (i.e. Buses and coaches)
- 🔑 Attract OEMs production in LCV
- ⚠️ New NAFTA rules favor local/US prod.
- ⚠️ Potential tariff uplift with Section 232

## Key recommendations



Set up a task force led by biz. associations to increase SME market access in auto parts to the US



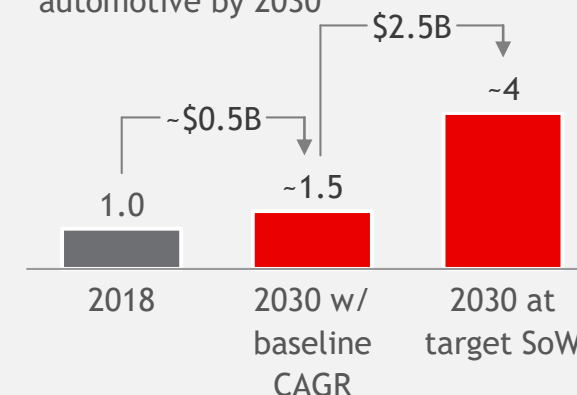
Assess buses & coaches opportunity in the US market



Set up an action group to attract FDI and JVs in new production and R&D center investments

## Upside potential

Turkey can capture additional  $\sim \$3B^2$  in automotive by 2030



1. On 4-digit HS code level 2. Turkey's 2030 baseline is projected at 50% of 2011-2018 CAGR; additional upside potential is calculated based on the expected SOW capture in prioritized segments in addition to baseline growth

Source: International Trade Centre; expert interviews; BCG analysis

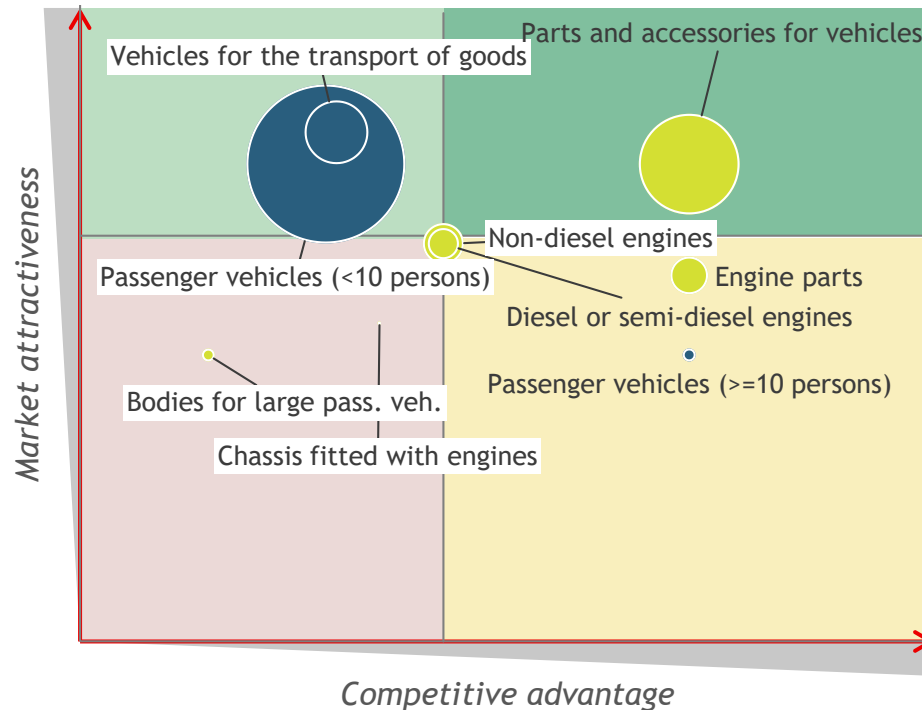




# Turkey has a strong potential to capture Chinese share of wallet, but its design and R&D capabilities should complement cost position against potential competitors

## Product prioritization

● Parts ● Vehicles



## Main competitors

### Product (\$B)

	China	Taiwan	India	Macedonia <sup>1</sup>	Turkey
Parts & Accessories for vehicles	11.6	1.7	1.3	-	0.3
Body parts	1.7	0.5	0.02	-	0.1
Drive Axles	0.4	0.1	0.2	-	0.06
Brakes	1.9	0.03	0.2	-	0.05
Suspension	0.9	0.1	0.1	-	0.03
Road Wheel	2.8	0.1	0.1	-	0.02
Passenger vehicles (>=10 persons)	-	-	-	0.2	0.04
Buses & Coaches	-	-	-	0.2	0.04

## Competitive analysis

Product	Strengths	Weaknesses
Parts & accessories	Scale of production Good infrastructure	Quality of production IP Risks
Parts & accessories	High R&D capabilities Adv. manufacturing	Small scale
Parts & accessories	Government support Efficient supply chain	Poor infrastructure Low design capability



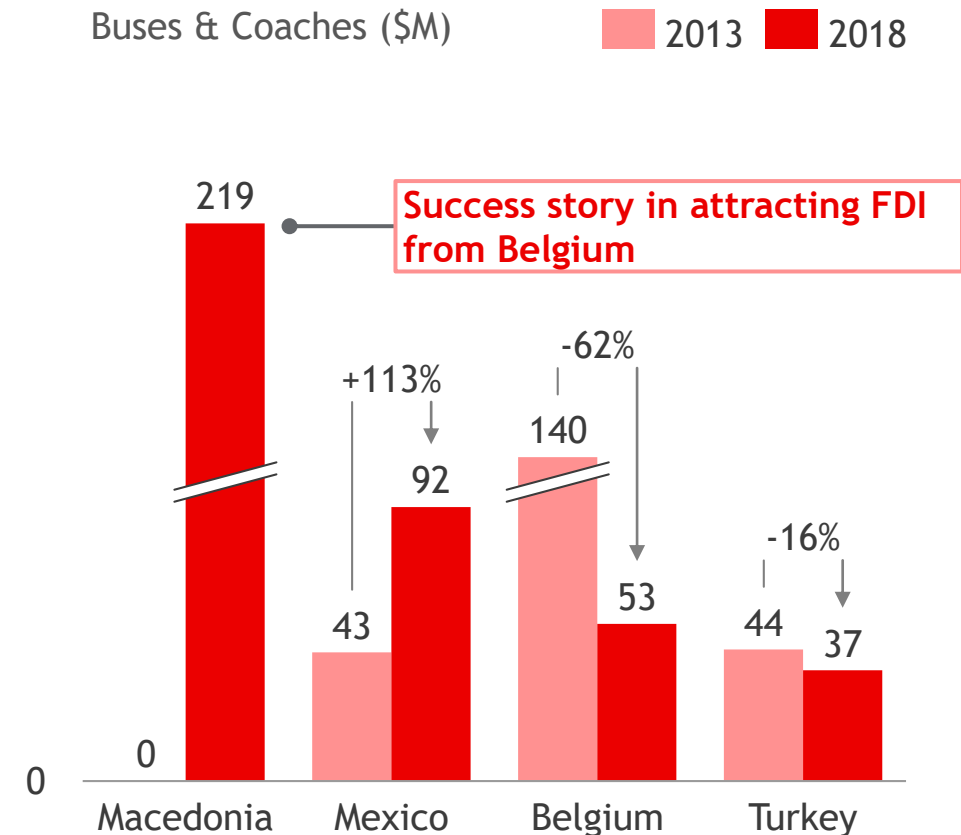
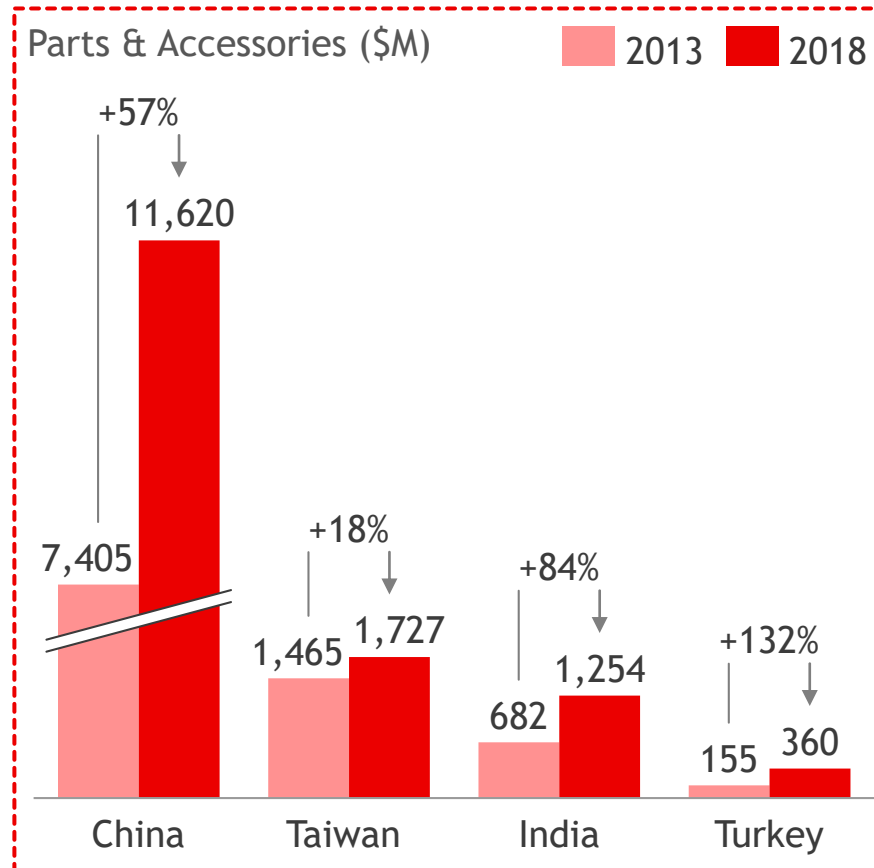
Turkey can capture market share thanks to its cost competitive design and R&D capabilities

1. Country's official name is North Macedonia since January 2019  
Source: International Trade Centre; expert interviews; BCG analysis



## Parts & accessories is the most promising category with recent growth trajectory; potential opportunity for Turkish firms in buses & coaches

Export performance of Turkey vs key competitors in prioritized segments:



Source: International Trade Centre; BCG analysis



# Despite the trade polices aimed at shifting production back to the US, multiple opportunities exist to tap into the market



## Risks



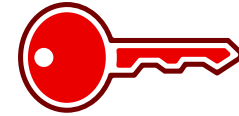
### Tariff barriers:

- Due to the **exclusion from the GSP**, vehicles and auto parts will be subject to a **2.5% duty**
- **Additional tariffs on auto and auto parts** are under consideration in the **section 232 review**
  - Could lead to **20-25% duty**



### Non-tariff barriers:

- New **NAFTA requirements**:
  - 75% "Regional Value Content" (any NAFTA)
  - 40-45% "Labor Value Content" (workers @ \$16/h)



## Opportunities



**Capture share of wallet from China in automotive parts** due to escalated trade wars and increasing labour costs



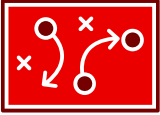
**Increase exports in selected markets** e.g. leverage production expertise in buses & coaches to reach fair market share in \$1B import market in the US



**Attract OEMs for production in LCV** by leveraging Turkey's cost-efficient R&D capabilities and its position as production hub



# Key recommendations for automotive and parts



## Key recommendations



### Set up a task force with key stakeholders led by business associations to increase SME automotive suppliers' market access to the US

- An action group led by TAYSAD (Automotive Suppliers Association of Turkey) and involvement of other stakeholders to identify opportunities and facilitate SME access to biz & legal advisory for the US market TAYSAD and TIM (Turkish Exporters' Assembly) to increase SME knowledge in key topics:
  - legal & technical regulations on auto parts by TAYSAD
  - how to do business in the US (by TIM)
- TAIK (Turkey-US Business Council), TIM and Turkish commercial service in the US to identify target buyers and to facilitate outreach by SMEs by a structured reach out plan
- TIM and Min. of Trade to support Turkish suppliers with newly designed trade centers



### Assess US specific buses & coaches opportunities

- Relevant biz. associations (e.g. OSD and OİB<sup>1</sup>) to identify key buyers in the US and local product req.
- Min. of Trade to consider a targeted incentive structure to enable homologation and product customization investment for the US market tailored for selected markets



### Set up an industry-wide action group including TAYSAD, DEİK, YASED and Investment Office<sup>2</sup> to attract and facilitate FDI and JVs in new production and R&D center investments

- Actively identify and pursue opportunities from global OEMs and Tier 1 suppliers
- Set up an action plan to promote Turkey's advantages and capabilities in automotive production and R&D

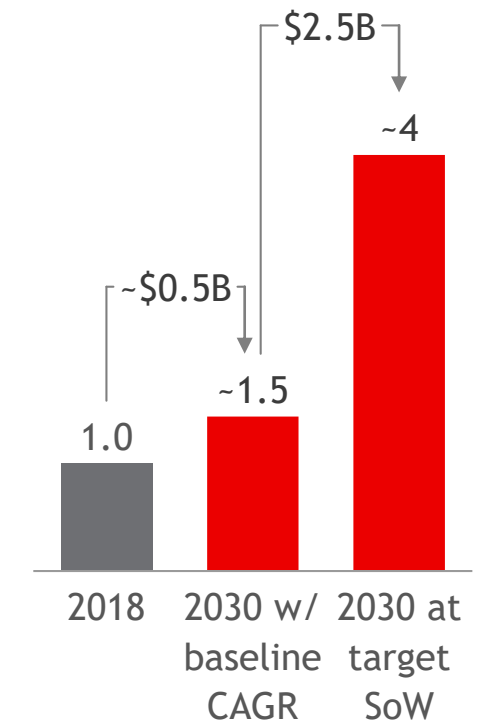
1. OSD (Automotive Manufacturers Association), OİB (Automotive Industry Exporters' Association)

2. DEİK (Foreign Economic Relations Board of Turkey), YASED (International Investors Association)

Source: International Trade Centre; expert interviews; BCG analysis



## Potential upsides



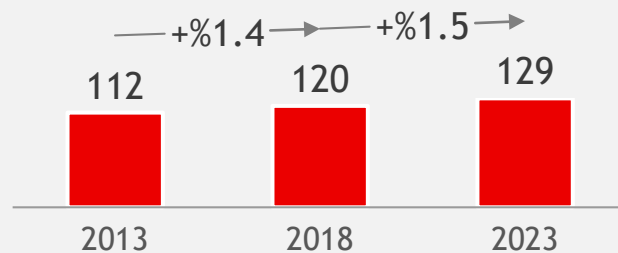




# Textile & apparel: Untapped potential to be seized through better design and brand image

## Market overview

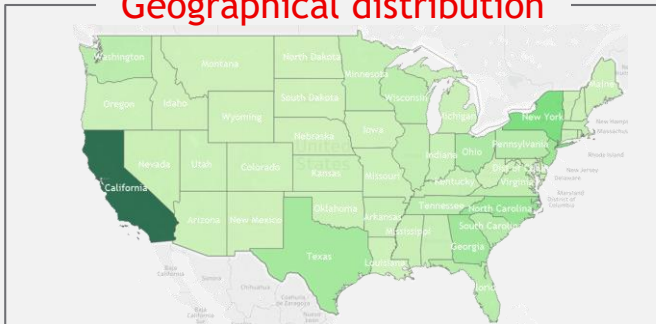
US textile imports (\$B)



## Top Importers



## Geographical distribution



## Product prioritization<sup>1</sup>

Prioritized segments:

- Apparel (knitted)
- Apparel (non-knitted)
- Home textile
- Non-wovens

Selected products' exports to the US (\$B) **Key strength**

China	42.4	Economies of Scale
India	8.5	Labor Cost
Italy	2.2	High Brand Image

## Key opportunities & risks

- 🔑 Grab SoW from China
- 🔑 Capture greater share via design and brand image
- 🔑 Penetrate into non-woven textiles
- 🔑 Leverage online channels
- ⚠️ Near-shoring and lead time
- ⚠️ GSP ousting impact on textile tariffs
- ⚠️ Automation drives production back to the US

## Key recommendations



Create an action group led by biz. assoc. to attract US buyers in China



Create a task force for Turkish apparel brands to raise country image



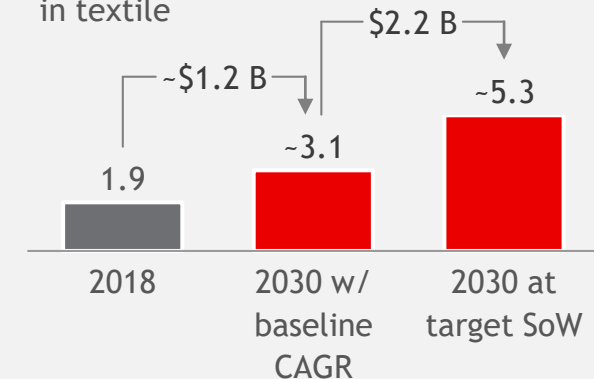
Promote capability development in the non-woven industry



Increase market penetration via digital channels

## Upside potential

Turkey can capture additional ~\$3.4 B<sup>2</sup> in textile



1. On 4-digit HS code level 2. Turkey's 2030 baseline is projected at 50% of 2011-2018 CAGR; additional upside potential is calculated based on the expected SOW capture in prioritized segments in addition to baseline growth

Source: International Trade Centre; expert interviews; BCG analysis

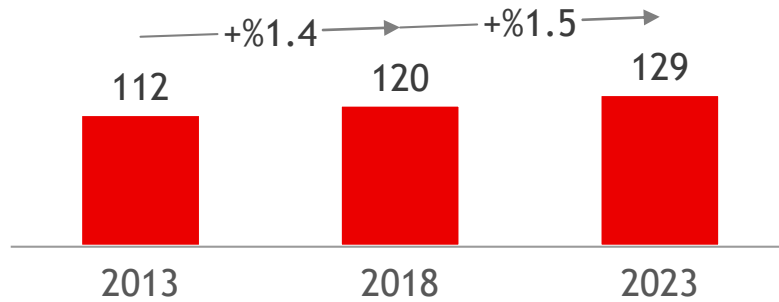




# US textile & apparel market is dominated by cost-competitive Asian players

## Market overview

US textile imports (\$B)



11% of all US imports

2% of US imports from TR

17% of TR's exports to world

## Key sector trends



Near-sourcing

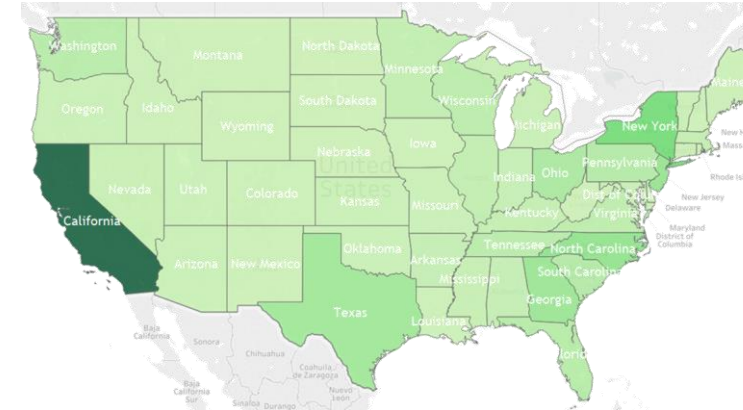


Sustainability across the value chain



Growth in technical textiles

## Geographical distribution & top import sources



### Top Segments

### Total value (\$B)

### Top exporters

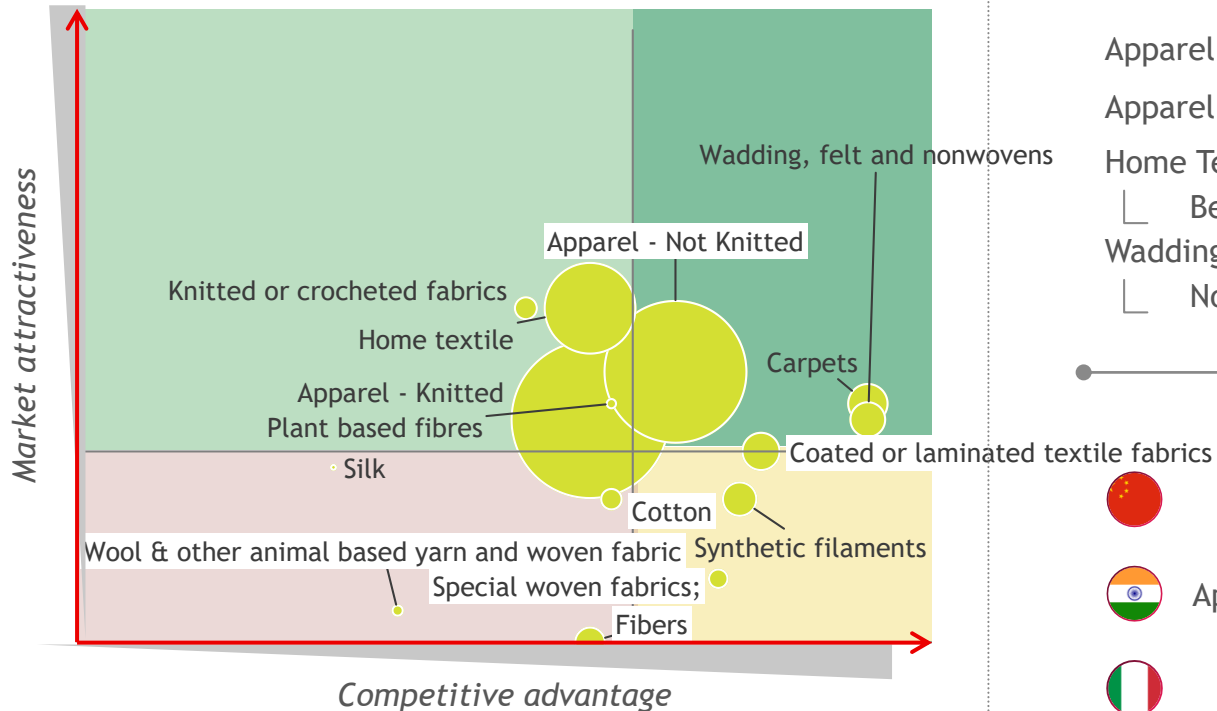
Apparel (knitted)	48	China	Vietnam	Indonesia	Honduras	India
Apparel (non-knitted)	39	China	Vietnam	Bangla.	Indonesia	Mexico
Home Textile	16	China	India	Pakistan	Mexico	Turkey
Carpets	6	India	China	Turkey	Egypt	Belgium
Non-Woven	1.6	China	Germany	Japan	Canada	Turkey

Source: International Trade Centre; expert interviews; BCG analysis



# Turkey cannot compete solely on price; quality and design elements of Turkish products should be prioritized

## Product prioritization



## Main competitors

### Product

	China	India	Jordan	Egypt	Italy	Germany	Turkey
Apparel (knitted)	15.3	1.8	1.1	0.5	0.5	-	0.2
Apparel (not-knitted)	13.4	2.1	0.4	0.4	1.1	-	0.4
Home Textile	9.0	2.6			-	-	0.3
└ Bed, Kitchen & other linen	2.2	2			-	-	0.2
Wadding, felt and nonwovens	0.8	-			-	0.2	0.1
└ Nonwovens	0.4	-			-	0.2	0.1

FTA with the US

## Competitive analysis

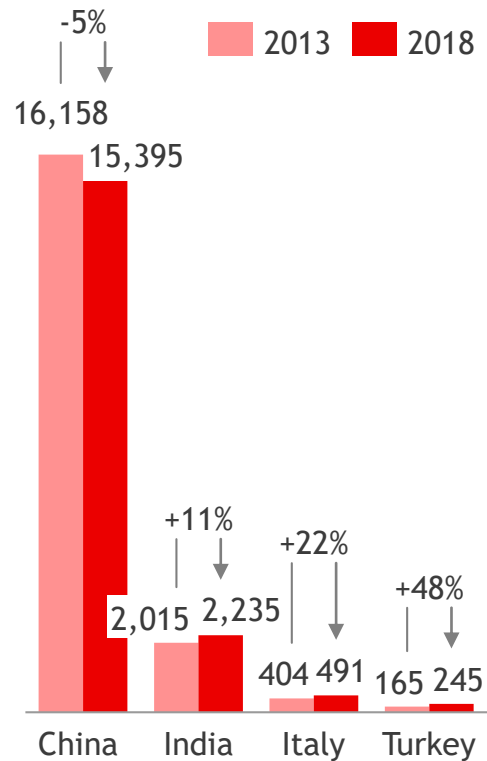
Product	Strengths	Weaknesses
Textile & Apteral	Scale Diverse product portfolio	Low brand awareness Inc. labour cost
Apparel & Home Textile	Government support Low labor costs	Rigid labour laws Outdated infra.
Apparel	Brand image Long standing relations	Cost competitiveness Long time to market
Non - Woven	Top tier technology High quality	Long time to market Inflexibility in pricing



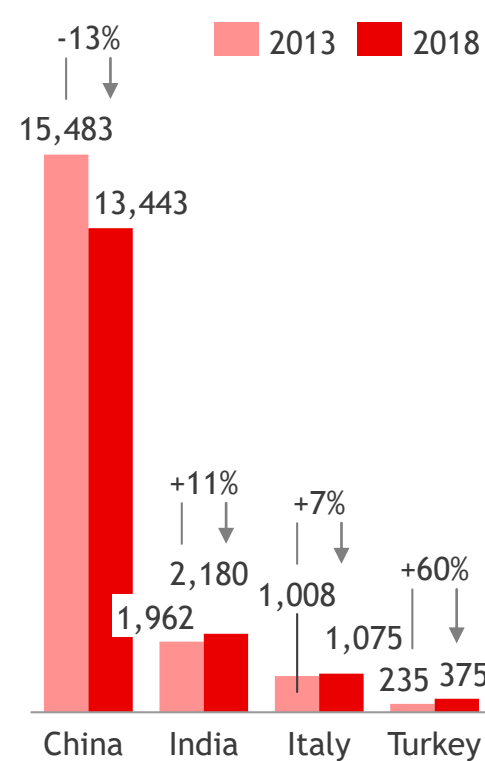
# Turkey has been growing faster than its competitors in these 4 priority segments

Recent growth trajectory promises future growth for Turkey

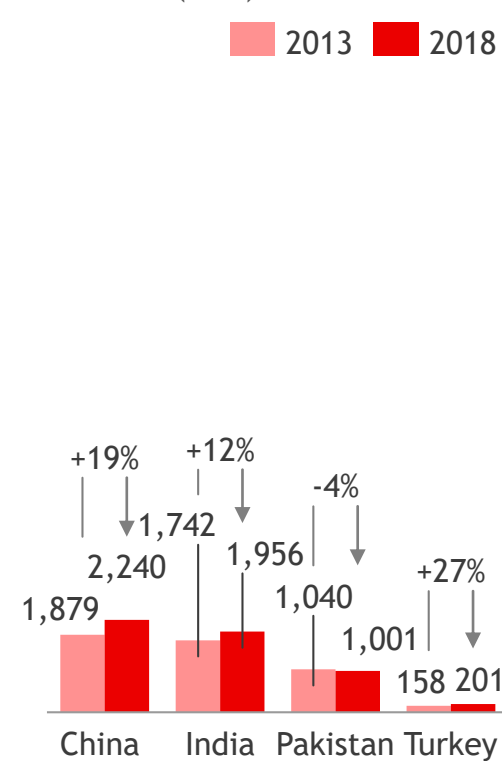
Apparel (knitted) (\$ M)



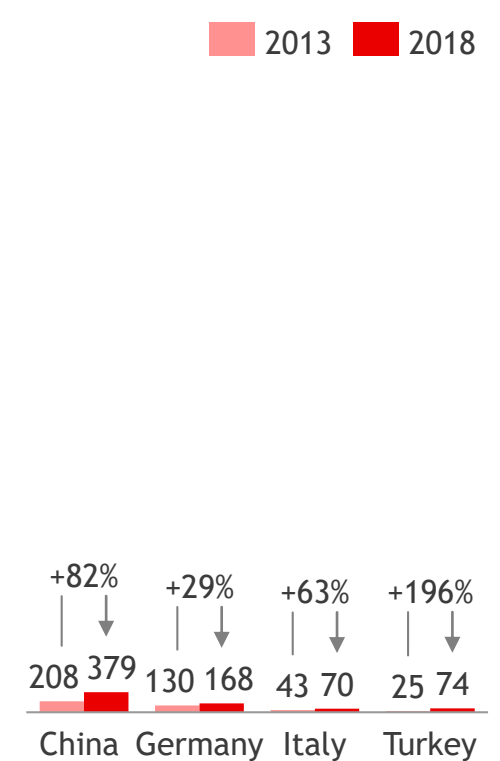
Apparel (not knitted) (\$ M)



Bed, kitchen & other linen (\$ M)



Non-wovens (\$ M)





# Production will move closer to the US but Turkey still has potential in higher value added segments



## Risks



Companies are near-shoring production by moving production closer to end-markets for items with short shelf life; requires fast reactions



Increase in use of automation in textile production is bringing manufacturing back to the US by mitigating labor cost disadvantage



## Opportunities



Capture share of wallet from China in higher value added products thanks to its decreased competitiveness through escalated trade wars and increasing labor costs



Capture a greater share of the US apparel and home textile market by leveraging Turkish brands' strong design capabilities and high quality



Seize the momentum in non-woven exports (e.g. sport and leisure clothing) by leveraging Turkey's cost competitive production and expertise

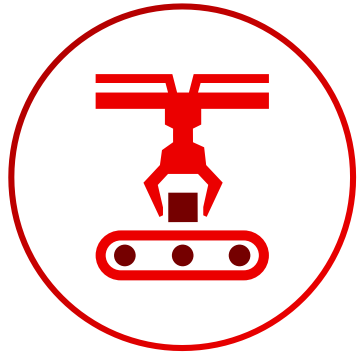


Leverage established and emerging digital channels in order to penetrate the market e.g. Amazon and StitchFix



# 5 key elements to boost Turkish textile & apparel exports in the US

Turkey will have difficulty in competing on costs alone



**Achieving high quality and reliability in large scale production**

- Sustain continuity and reliability in large scale production



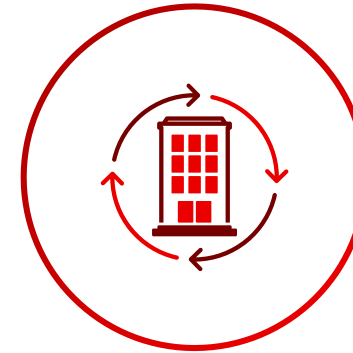
**Ensuring sustainable sourcing for US buyers across the value chain**

- Educate and enable practices:
  - Traceability
  - Circularity
  - Social responsibility (e.g. labor rights, women rights etc.)



**Improving country & brand image through targeted positioning**

- Define what Turkish textiles stands for
- Keep messages consistent across all channels
- Invest in branding
  - Buy US-based brands
  - Run active marketing campaign



**Improve access to the US textile & apparel industry with US commercial bases**

- Establish and operate Turkish trade centers:
  - Meeting rooms
  - Event halls
  - Display area
  - Warehouses



**Digital presence: Building brand awareness through e-commerce**

- Develop digital market strategy and guide Turkish firms in digital sales channels for the US (e.g. how to sell online in the US, how to manage supply chain, logistics, returned items via online channel)



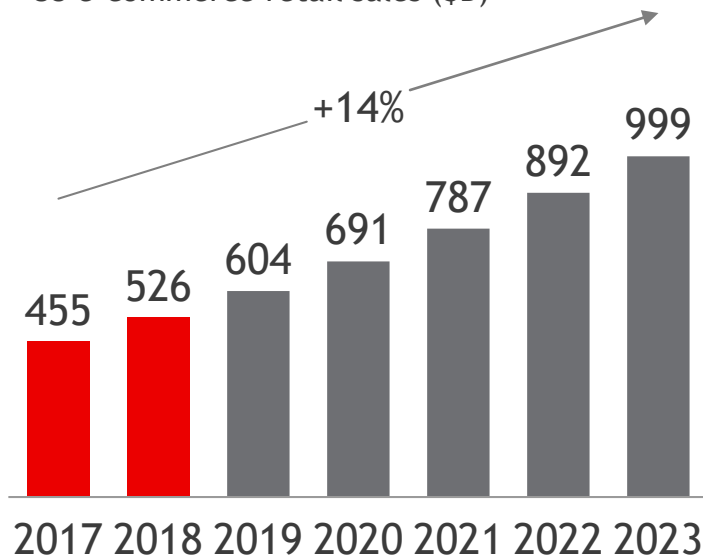
# Turkish textile & apparel companies should seize opportunities in digital channels for growth and brand image

## Significant opportunities in e-commerce for Turkish firms

### E-commerce retail sales in the US

- Expected to grow with %14 p.a.
- Forecasted to reach ~\$1T in 2023

US e-commerce retail sales (\$B)



Note: Deflated by US CPI 2017 prices

Source: Statista; WTO; US Fed Reserve; BCG Henderson Institute; Center for Macroeconomics

## Multiple mediums exist for market entry in the US apparel e-commerce



Amazon just behind Walmart in the US apparel market with a share of ~8% in 2017



### STITCH FIX

Online styling service which periodically sends subscribers five pieces of apparel according to their preferences and provides free returns

Turkish firms further use the US digital market through online retailers, building brand awareness & strength

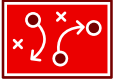
## However Turkish firms lack know-how and infrastructure to penetrate

- Turkish textile & apparel firms lack sufficient know-how to sell online in the US market (e.g. how to manage supply chain, logistics, returned items etc.)
- Insufficient infrastructure in software, hardware, and handling operations

Turkish firms need to be supported via training programs tailored for e-commerce and the US market (esp. for SMEs)



# Key recommendations for textile & apparel



## Key recommendations



### Create a task force led by business associations to unlock access to key US buyers

- IHKIB<sup>1</sup> to identify key products and buyers to target in the US market
- TIM, IHKIB and TGSD<sup>1</sup> to set up individual visits to key US buyers with Turkish textile association leaders
- TIM to facilitate participation of Turkish producers in Chinese textile fairs and to promote Turkish textile industry targeting US buyers sourcing from China
- Turkish commercial service in the US to employ a textile trade rep. to facilitate access to US buyers
- TIM to create a US trade center that includes meeting rooms, show rooms and event hall to act as a base for Turkish producers and all export promotion efforts in the US



### Create a task force for Turkish apparel brands to raise country image

- Relevant biz. associations (e.g. IHKIB and TGSD) to set-up a task force to promote Turkish brands and apparel industry in the US via country PR and social media campaigns
- Emphasize Turkish products' sustainable sourcing and social responsibility features
- Help Turkish SMEs develop relationship with major US retailers



### Promote capability development and cooperation in non-woven industry

- Min. of Trade to consider a scheme to incentivize product development and R&D investments for Turkish producers to adhere US norms and standards
- ITHIB<sup>1</sup> to create a commercial set-up to pool complementary offerings to target large buyers

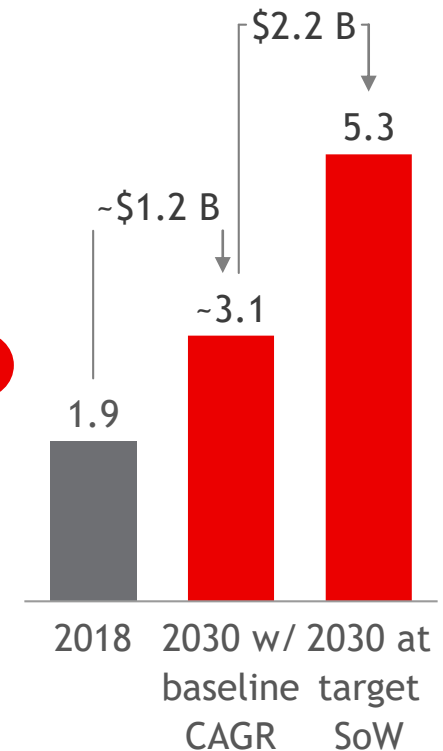


### Focus on digital channels and increase awareness through success stories

- Training programs on digital sales channels in the US to be run by TIM and IHKIB



## Potential upsides



1. IHKIB (Istanbul Apparel Exporters' Association), TGSD (Turkish Clothing Manufacturers' Association), ITHIB (Istanbul Textile and Raw Materials Exporters' Association) Source: International Trade Centre; expert interviews; BCG analysis



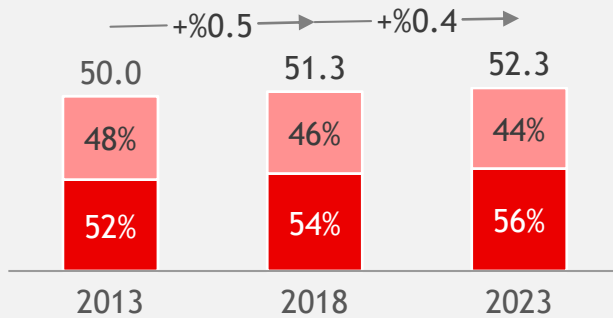


# Jewelry: Turkey's design capabilities and brand image should be improved to reach fair share in gold jewelry

## Market overview

US jewelry imports from world (\$B)

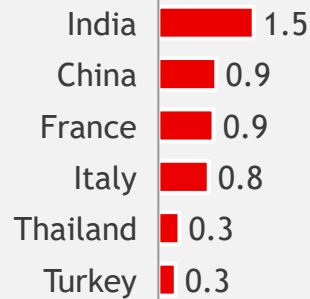
■ Metal ■ Stone



## Product prioritization<sup>1</sup>

Gold jewelry prioritized due to large market size, fast growth and Turkey's competitive edge in the category

Gold jewelry exports to US (\$B)



Key strength

Gov. incentives  
Lab. costs, scale  
Brand strength  
Brand strength  
Labor costs  
Design capabilities

## Key recommendations



Consider negotiating tariffs in order to eliminate Turkey's primary disadvantage against its competitors (e.g. loss of GSP preference)

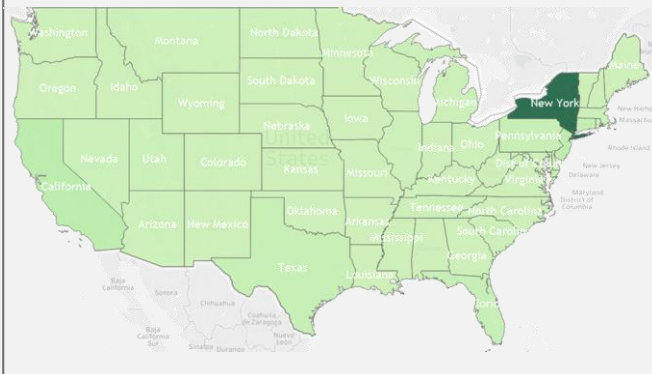


Place efforts on marketing and branding with sector firms under jewelry associations



Place business facilitation efforts via key stakeholders to dev. relations with department stores, Amazon and mass merchandisers

## Geographical distribution



## Risks & opportunities



Increasing share of value-for-money segment, where Turkey is positioned



Capture China's SoW due to the trade relations between US & China



Target Italy's and France's SoW in the lower premium segment



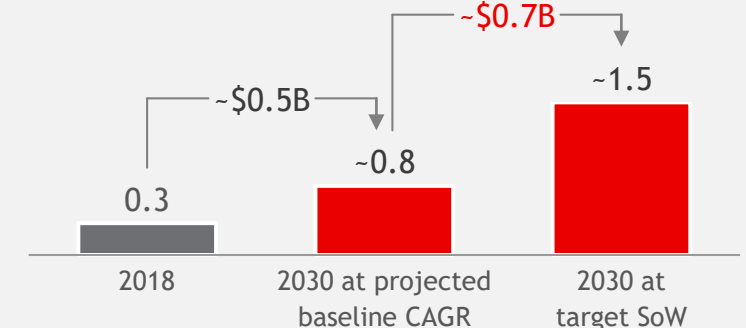
Marginal negative effect of loss of GSP pref.



Fluctuation of gold prices due to economic uncertainty

## Upside potential

Turkey can capture additional ~\$1.2 B<sup>2</sup> in jewelry



1. On 4-digit HS code level 2. Turkey's 2030 baseline is projected at 50% of 2011-2018 CAGR; targeted 2030 share of wallet (SoW) is three times the 2018 SoW  
Source: International Trade Centre; expert interviews; BCG analysis

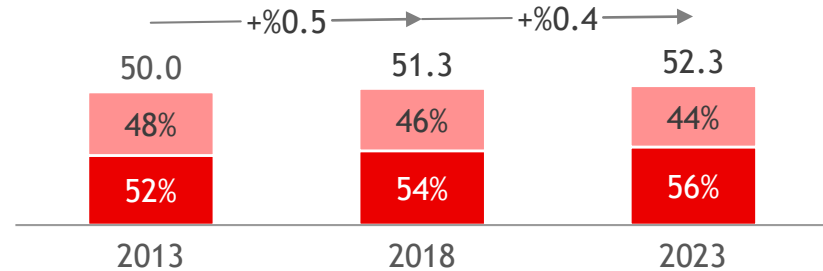


# Value-for-money and brand strength stand out as the key success factors of the US jewelry market

## Market overview

US jewelry imports from world (\$B)

■ Metal ■ Stone

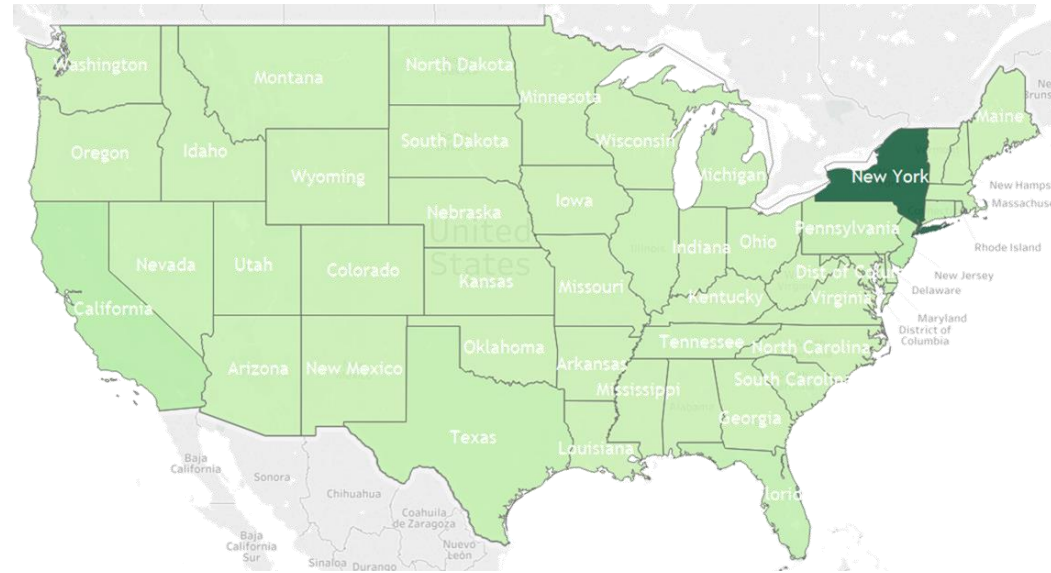


2.0% of all US imports<sup>1</sup>

2.9% of US imports from TR<sup>1</sup>

2.7% of TR's exports to world<sup>1</sup>

## Geographical distribution of imports



## Key sector facts & trends



**Growing value-for-money segment** driven by increasing value-consciousness, and the growth of internet retailing which offer lower prices and promotional activities at department stores



**Branding is a key success factor;** American consumers give increasing importance to brand image and strength



**Opportunity via marketing of jewelry;** US consumers' top reason for not buying jewelry is "not having a reason"



**Digital is crucial** because it provides the medium for better product discovery and convenient shopping



**Market consolidation** towards larger chains driven by convenience and value

1. 2018 figures

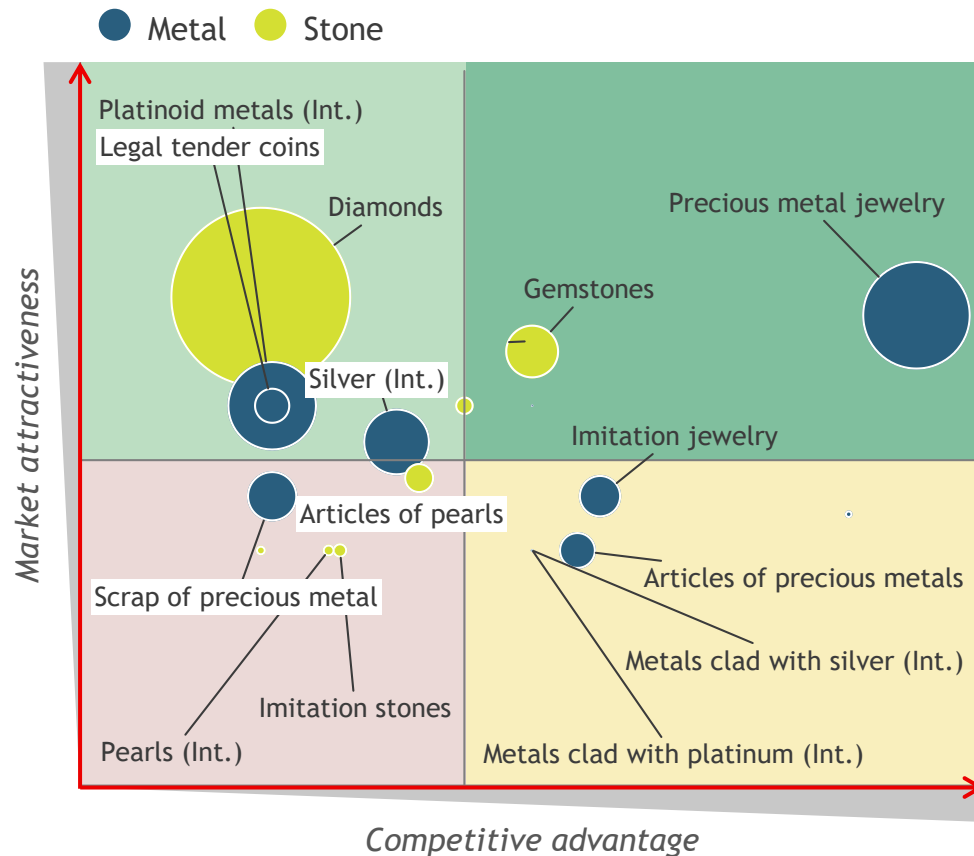
Source: International Trade Centre; Mintel; US Census Bureau; Euromonitor; BCG analysis



# Efforts should be focused on seizing the substantial opportunity in the US precious metal jewelry market where Turkey is highly competitive

## Product prioritization

Turkey is highly competitive in **precious metal jewelry** and should focus its efforts on capturing a larger share of the substantial market



Source: International Trade Centre; expert interviews; BCG analysis

## Product mix analysis

Exports to the US (\$M)

□ Highest exported product of a country

	India	China	Italy	Thailand	France	Turkey
Precious metal jewelry	1,840	1,256	966	903	886	296
Gold	1,518	922	803	336	880	279
Silver	316	329	161	566	5	17
Base metal	5	5	2	2	1	1

## Competitive analysis

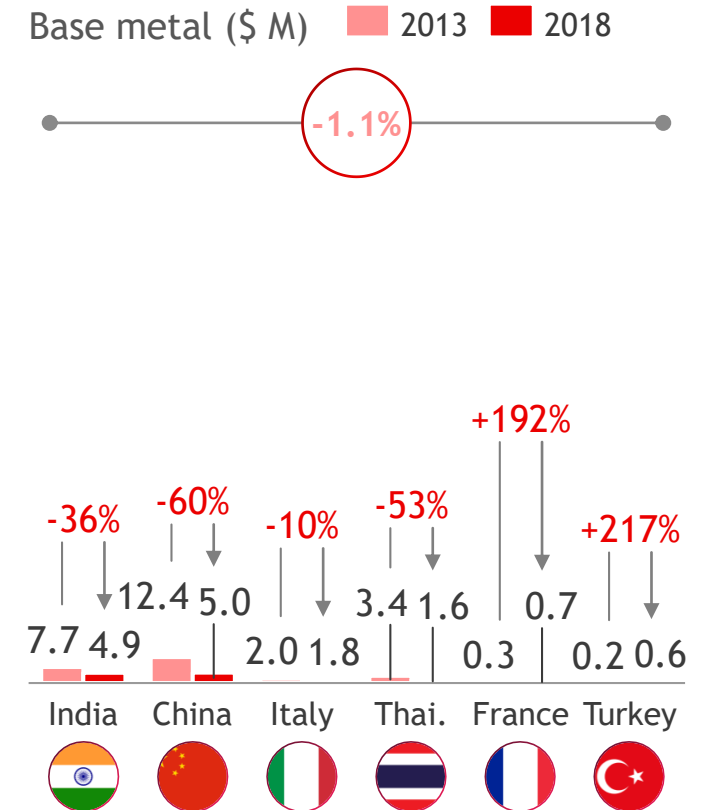
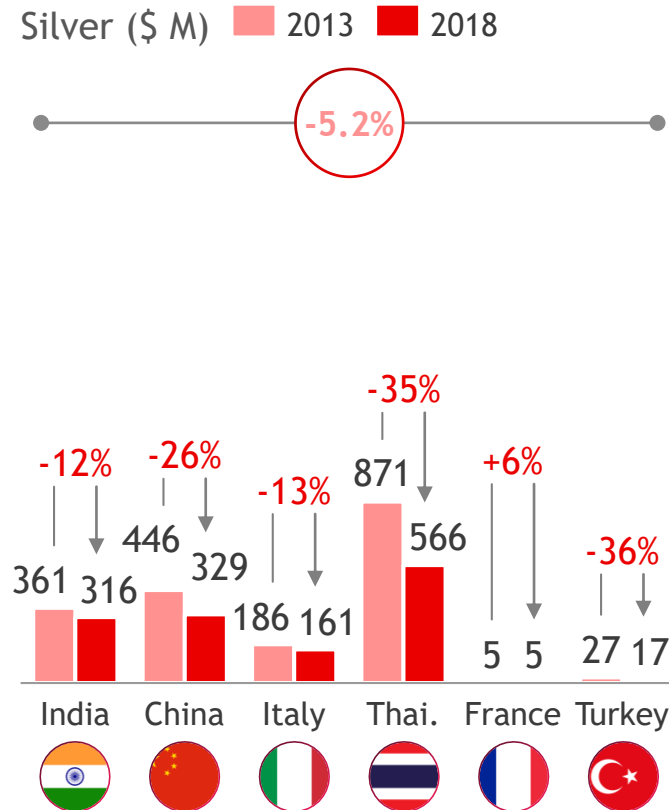
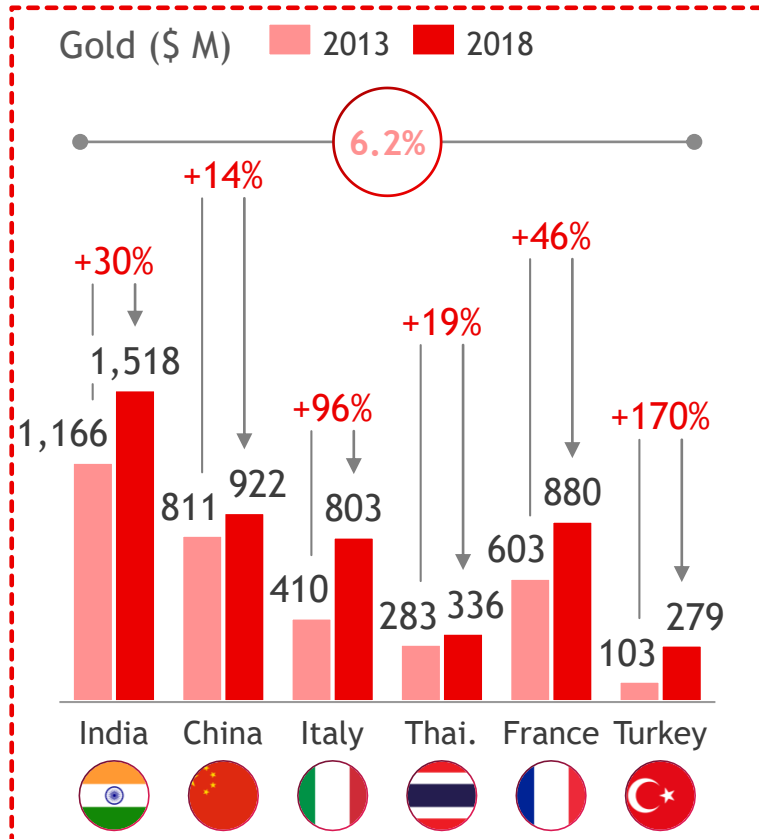
Product	Strengths	Weaknesses
India Gold	Low labor costs, government incentives	Limited design capabilities
China Gold	Low labor costs, scale, design	Low durability of products
Italy Gold	Brand strength, design, country PR	Product portfolio limited to premium & high priced products
Thailand Silver	Low labor costs & product design	Increased taxation
France Gold	Design, brand strength	Product portfolio limited to premium & high priced products
Turkey Gold	Low labor costs, design & quality, high durability of products	Tariff & quota disadvantages



# Gold is the most attractive market among precious metal jewelry and Turkey's recent performance is very promising

Export performance of Turkey vs. key competitors in prioritized products

(X%) US total import market CAGR<sup>1</sup> (13-18) for a given product



1. Compounded annual growth rate  
Source: International Trade Centre; BCG analysis



# Favorable US market trends and foreign trade dynamics outweigh the risks



## Risks



Tariffs on gold jewelry up from 1% to 6% as a result of loss of **GSP preference**



**Fluctuating gold prices** due to economic uncertainty, e.g. concerns over foreign policy



**Negative effect of economic downturn** in Turkey on cost structure of producers



## Opportunities



Increasing value-consciousness of consumers leading to the growth of **the share of value-for-money segment**, where Turkey is positioned



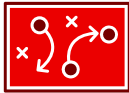
Opportunity to **capture China's share of wallet** due to the developments in trade relations between US & China



Opportunity to **capture Italy's and France's share of wallet in lower premium segment** through aggressive marketing and branding



# Key recommendations for jewelry



## Key recommendations



Consider **negotiating tariffs and quotas** in order to eliminate Turkey's primary disadvantage against its competitors



Put effort on marketing and branding with sector firms under jewelry associations (IMMIB)<sup>2</sup>:

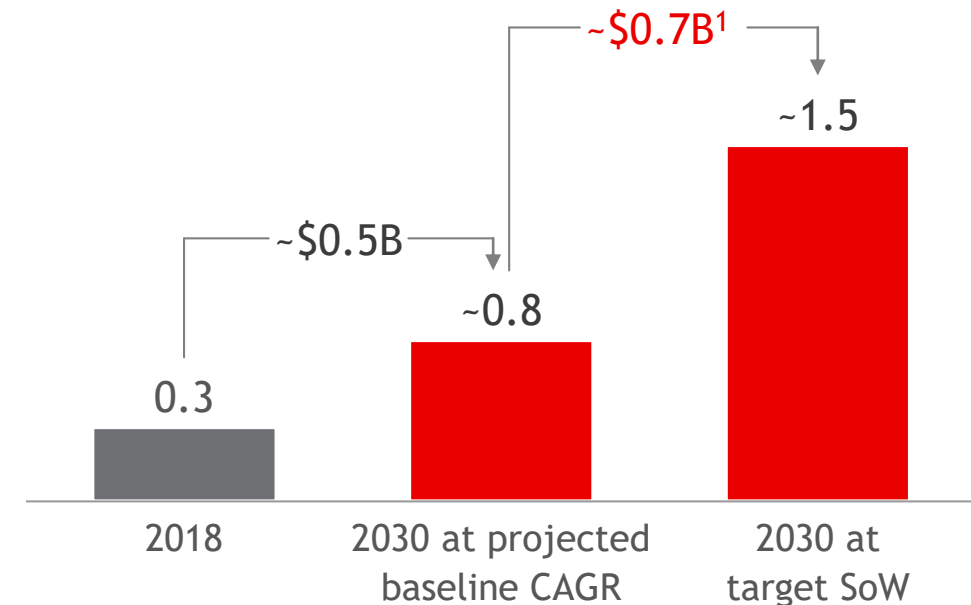
- Provide **transparency on ethical sourcing of materials** on product labels, catalogues, websites etc. in parallel with increasing sensitivity of US consumers
- **Increase digital presence through websites** (each firm's own website, a single website for all members of IMMIB, retailers' websites etc.) to provide consumers with better product discovery and convenient shopping
- **Establish strong brands** - as brand strength is increasingly becoming a key success factor - by building stories on **modernized heritage design** behind Turkish products and emphasizing Turkey's competitive edge on **value-for-money**



**Place business facilitation efforts** via TIM, IMMIB and other key stakeholders to develop relations with consolidating department stores, Amazon and mass merchandisers



## Potential upsides



1. Turkey's 2030 baseline is projected at 50% of 2011-2018 CAGR; targeted 2030 share of wallet (SoW) is three times the 2018 SoW

2. IMMIB (Istanbul Minerals and Metal Exporters' Association)

Source: International Trade Centre; Mintel; Euromonitor; expert interviews; BCG analysis



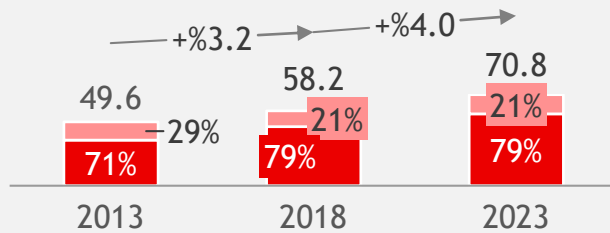


# Civil aerospace: Turkey needs to focus on R&D, human capital, and Industry 4.0 to reach its full potential

## Market overview

US civil aero. imports from world (\$B)

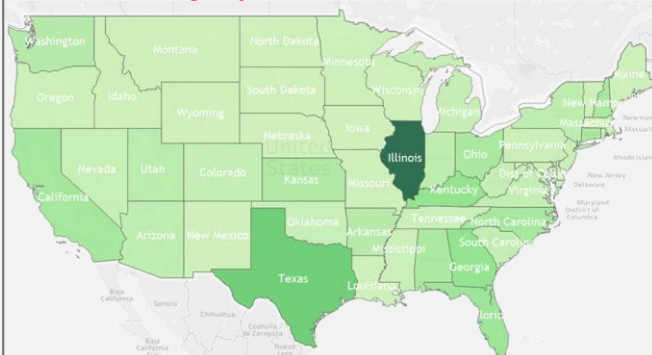
■ Aircraft ■ Engines & parts & gear



## Top importing companies



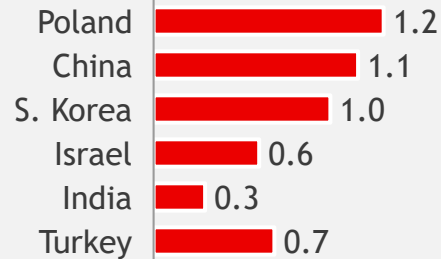
## Geographical distribution



## Product prioritization

Engines & engine parts and aircraft parts are prioritized; Turkey is competitive especially in aircraft parts

Selected products' exports to the US (\$B)



## Issues to be addressed



Current R&D capabilities are limited and Turkey is positioned lower in the value chain, exporting mainly commoditized components



Scarcity of skilled labor (engineers and mechanics/technicians)



Room for improvement in production technology

## Key recommendations



Increase investments in defense aerospace and R&D to further accelerate the way up the value chain



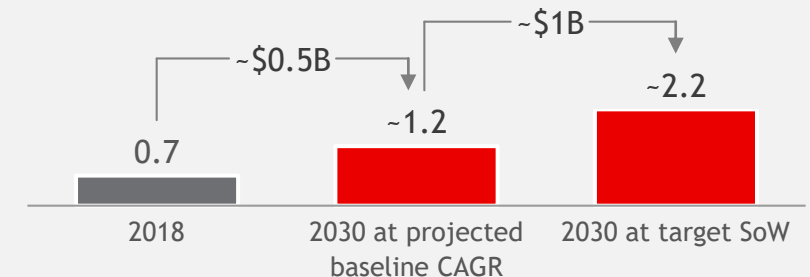
Collaborate with private sector to update university and vocational school curricula and invest in foreign language training



Invest in Industry 4.0 and production technology to optimize cost and increase price competitiveness

## Upside potential

Turkey has a total upside of \$1.5B<sup>1</sup> in civil aero.



1. Turkey's 2030 baseline is projected 50% of 2011-2018 CAGR; targeted 2030 share of wallet (SoW) is two times the 2018 SoW  
Source: International Trade Centre; expert interviews; BCG analysis



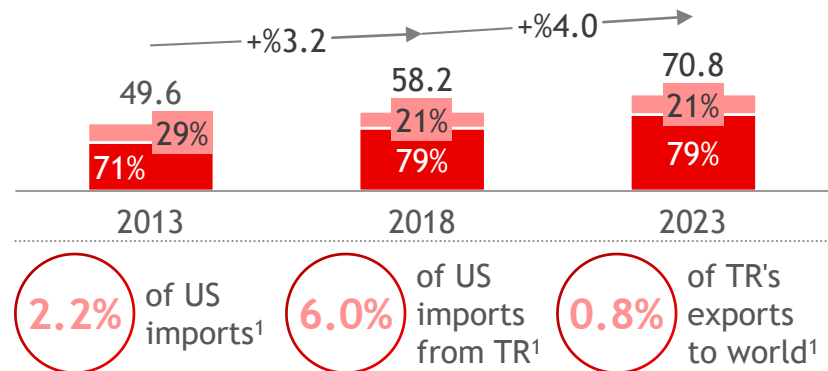


# Civil aerospace industry is consolidating in the US and the production of aircrafts is expected to ramp-up

## Market overview

US civil aerospace imports from world (\$B)

■ Aircraft ■ Engines & parts & gear



## Key sector facts & trends



Demand for **next-generation, fuel-efficient aircraft** continues to surge due to the rise in oil prices



**Production ramp-up likely** as commercial aircraft order backlog remains strong



**New entrants from Russia and China** could challenge the current duopoly of the US and Europe in the long run



**Risk of suppliers** facing difficulties in ramping up production to accommodate OEMs

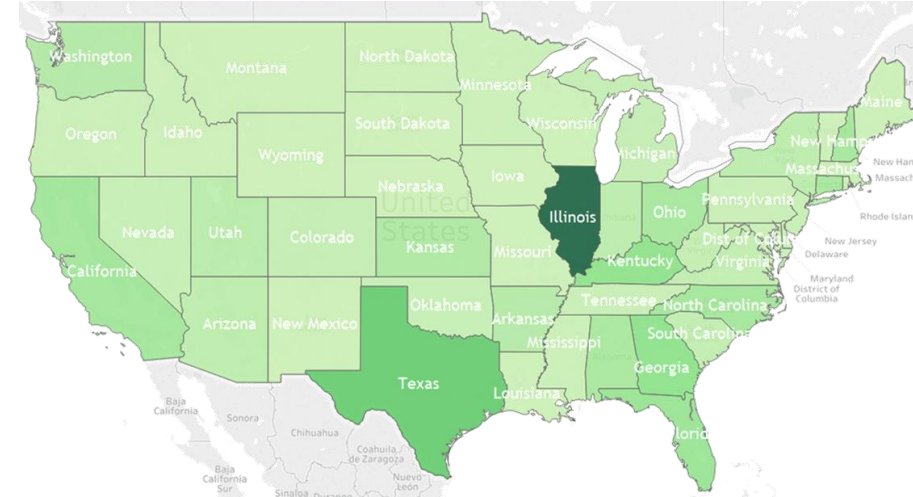


**Increasing M&A activity** as suppliers are consolidating for scale, cost-effectiveness, and higher negotiating power

1. 2018 figures

Source: International Trade Centre; Mintel; US Census Bureau; Datamyne; BCG analysis

## Geographical distribution of imports



## Importing companies

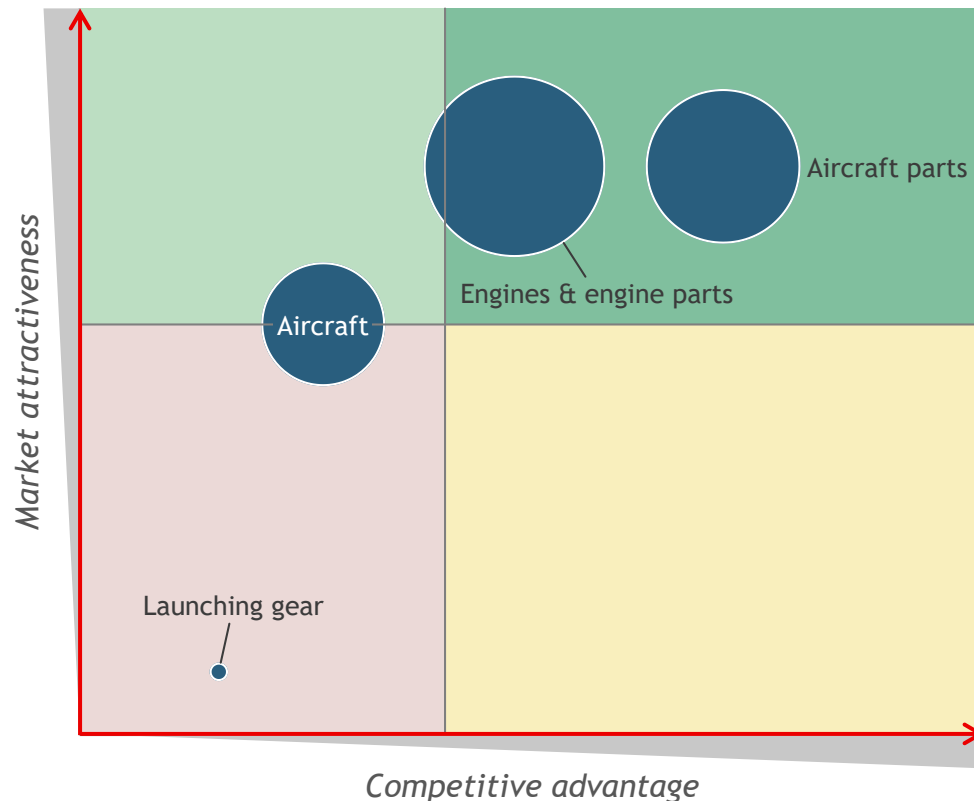
	Base in the US	Top products	Top countries of origin
	Washington	Aeroplane and helicopter parts, aircraft seats	China, Japan, Italy
	California	Aeroplane and helicopter parts, turbojet & turbopropeller parts	Belgium, China, France
	Kentucky	Turbojet & turbopropeller parts	Japan



# Turkey's target markets are commoditized aircraft and engine parts where quality, price, and timely delivery are key success factors

## Product prioritization

Engines & engine parts and aircraft parts are prioritized; Turkey is competitive especially in aircraft parts



1. The term "gas turbines" encompasses all aircraft engine types  
Source: International Trade Centre; expert interviews; BCG analysis

## Product mix analysis

Exports to the US (\$M)

Sub-products not exhaustive

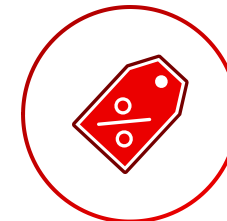
	Poland	China	S. Korea	Israel	India	Turkey
<b>Engines &amp; engine parts</b>	<b>1,037</b>	<b>548</b>	<b>265</b>	<b>215</b>	<b>103</b>	<b>318</b>
☆ Turbojet & turbopropeller parts	969	302	199	158	70	284
Turbojets of a thrust >25 kN	-	128	5	-	17	14
Other gas turbine <sup>1</sup> parts	35	50	2	41	4	5
<b>Aircraft parts</b>	<b>205</b>	<b>555</b>	<b>689</b>	<b>354</b>	<b>174</b>	<b>333</b>
☆ Aeroplane and heli. parts	134	532	685	345	171	320
Under-carriages and parts	69	19	3	2	1	4

## Key purchasing criteria of OEMs

OEMs produce technologically critical components themselves and outsource commoditized components to establish a global supplier base



Quality



Price

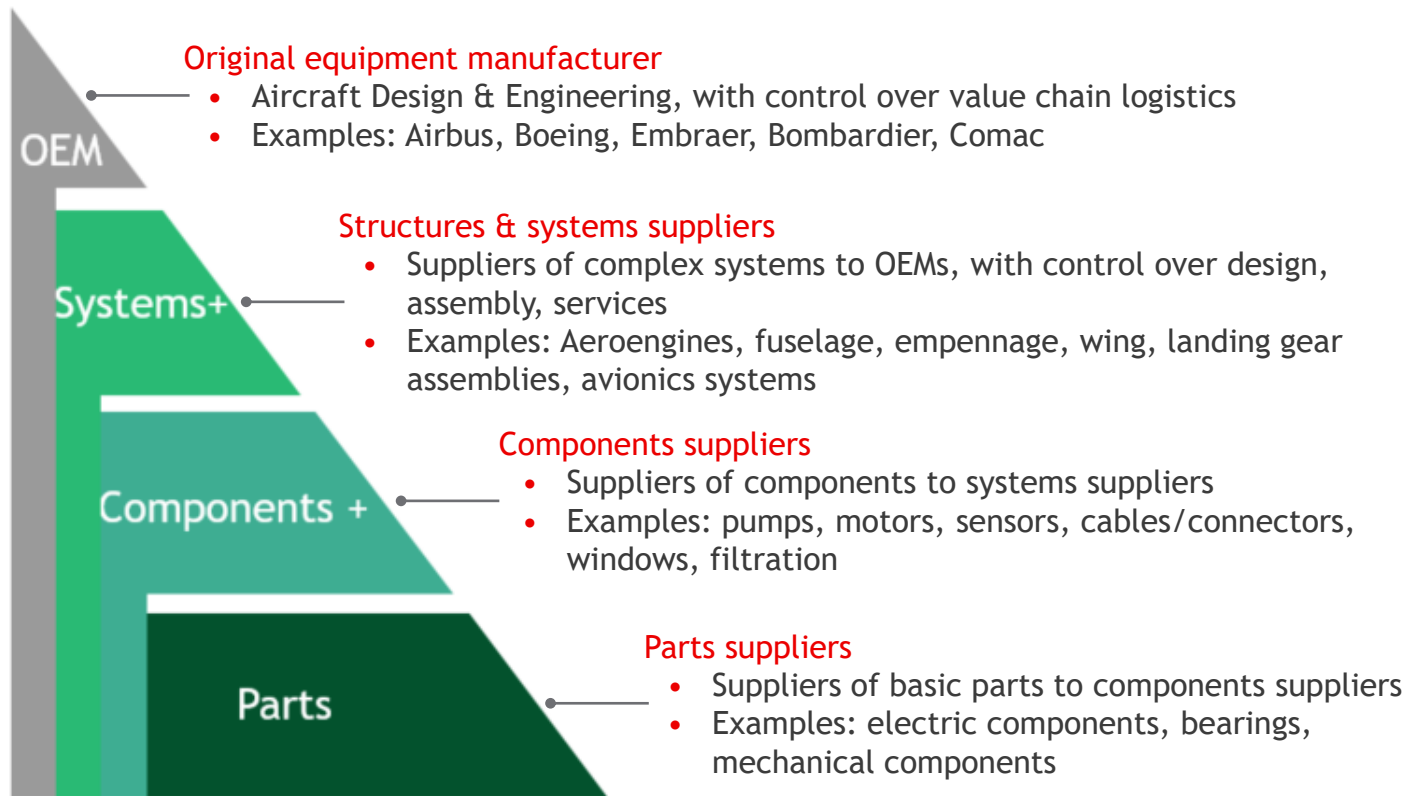


Timely delivery



# Turkey currently competes in commoditized aircraft components; opportunity to increase export volume by moving up the value chain

## Segmentation Description



## Example Countries





# Key recommendations for civil aerospace

## Continue investing in defense aerospace

Civil aerospace generally follows the developments in defense aerospace regarding aircraft components

Developing know-how and R&D capabilities quickly will bring Turkey up the value chain and increase its exports to the US

Turkey is on the right track with current defense aerospace programs



Increase investments in defense aerospace and R&D further accelerate on the way up the value chain

## Invest in education & skilled labor

Ease of finding skilled labor is very important for the quick development of Turkish aerospace industry

Current bottlenecks

- Engineering graduates lacking practical/sectoral knowledge
- Scarcity of vocational schools and qualified technicians/mechanics
- Scarcity of English speaking labor force



Update curricula collaboratively with private sector, invest in foreign language education

## Invest in Industry 4.0 in aerospace industry

Upgrade and automatization of production have many benefits



Higher quality



Lower labor costs



Less waste/scrap

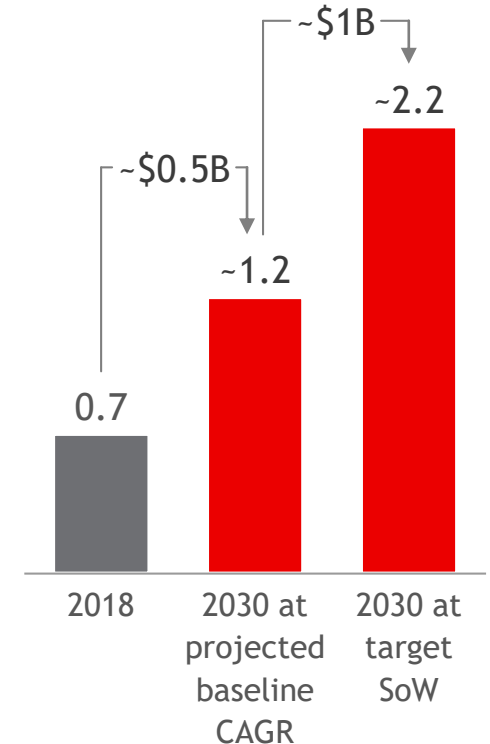


Higher price competitiveness



Invest in production technology to optimize cost and increase price competitiveness

~\$1.5B total potential upside in civil aero.



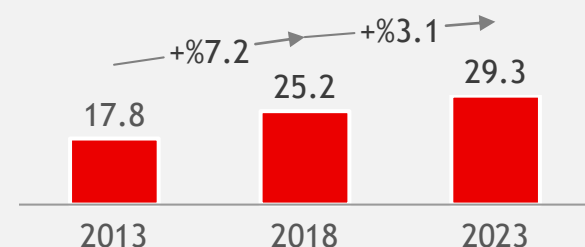
1. Turkey's 2030 baseline is projected 50% of 2011-2018 CAGR; targeted 2030 share of wallet (SoW) is two times the 2018 SoW  
Source: International Trade Centre; expert interviews; BCG research & analysis



# White goods: Considerable market potential and right to win for TR in fridge freezers, freezerless fridges and A/C units

## Market overview

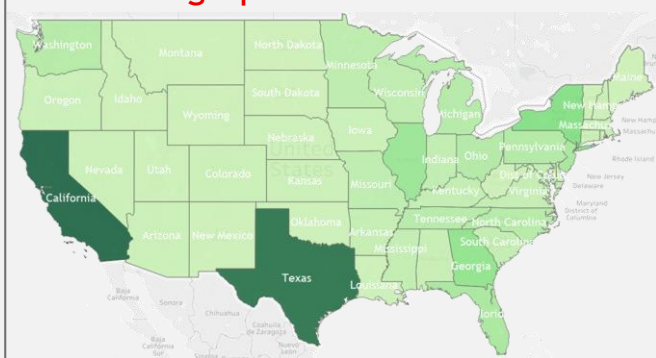
US white goods imports from world (\$B)



## Top importing companies



## Geographical distribution



## Product prioritization

Fridge freezers, freezerless fridges and A/Cs prioritized due to substantial potential and competitive edge of TR

Prioritized products' exports to the US (\$B)		Key strength
Mexico	8.5	NAFTA, proximity
China	5.9	Labor, scale
S. Korea	1.5	Presence in all channels
Turkey	0.2	Quality & value

## Risks & opportunities

- High potential in fridge freezers through product matching and branding
- Opportunity to capture China's dominant position in freezerless fridges
- Opportunity to capture China's SoW in window A/C market
- Marginal negative effect of loss of GSP -- tariff on A/Cs up from up from 0% to 1%
- Protectionism and "Made in USA" campaign, effective especially in Midwestern USA
- Investment requirement & production ramp-up period for product matching

## Key recommendations



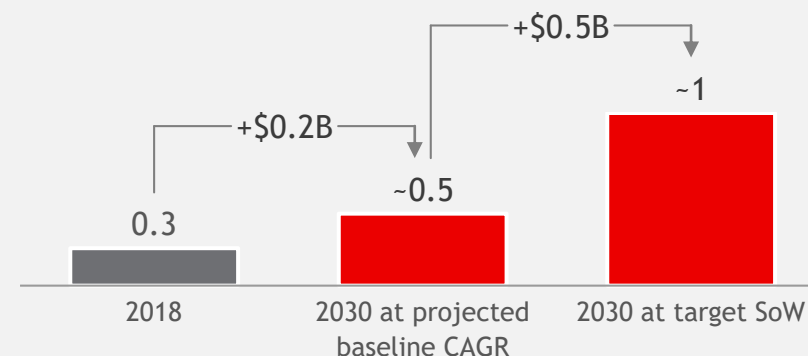
Improve product matching by addressing US consumer demands (e.g. larger refrigerators with multiple doors) and technological improvements (e.g. noise reduction)



Set a task force by key biz. associations to identify opportunities by capturing Chinese share of wallet

## Upside potential

Turkey can capture \$0.7B<sup>1</sup> in white goods



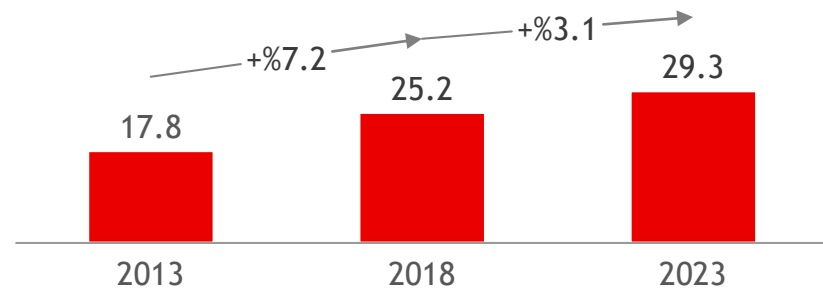
1. Turkey's 2030 baseline is projected at 50% of 2011-2018 CAGR; targeted 2030 share of wallet (SoW) is three times the 2018 SoW  
Source: International Trade Centre; expert interviews; BCG analysis



# Branding, large capacity, technological improvements, multi-functionality, and efficiency are key selling factors in the US

## Market overview

US white goods imports from world (\$B)



## Key sector facts & trends



**Brand strength** is more important than country of origin for US consumers, as brand is associated with reliability



**Large capacity** remains a key selling point across major appliances



**Compact living** trend in urban areas creating demand also for relatively smaller appliances



Consumers prioritize **technological improvements** and **multi-functional features** for appliances

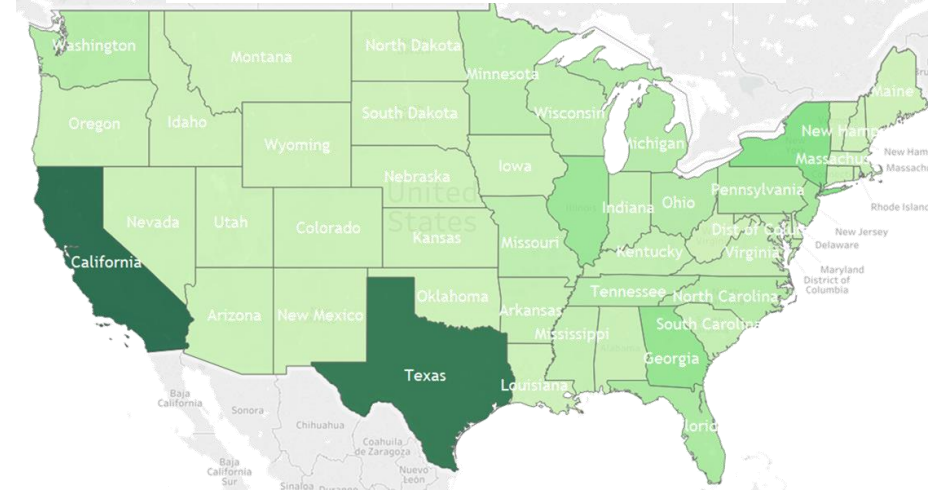


**High energy /water efficiency** associated with cost savings, consumers willing to pay a premium

1. 2018 figures

Source: International Trade Centre; Mintel; US Census Bureau; Euromonitor; Datamyne; BCG analysis

## Geographical distribution of imports



## Importing companies

	Base in the US	Top products	Top countries of origin
	New Jersey	Fridge freezers, washing machines, cooking appliances	S. Korea, Thailand, China
	California	Fridge freezers, microwaves, A/C parts	China, Hong Kong, Malaysia
	New Jersey	Fridge freezers, laundry appliances	S. Korea, China, Vietnam
	North Carolina	Freezers, microwaves, A/Cs	China, Hong Kong, Sweden
	Georgia	A/Cs, A/C parts, cooking appliances	Japan, Thailand, China



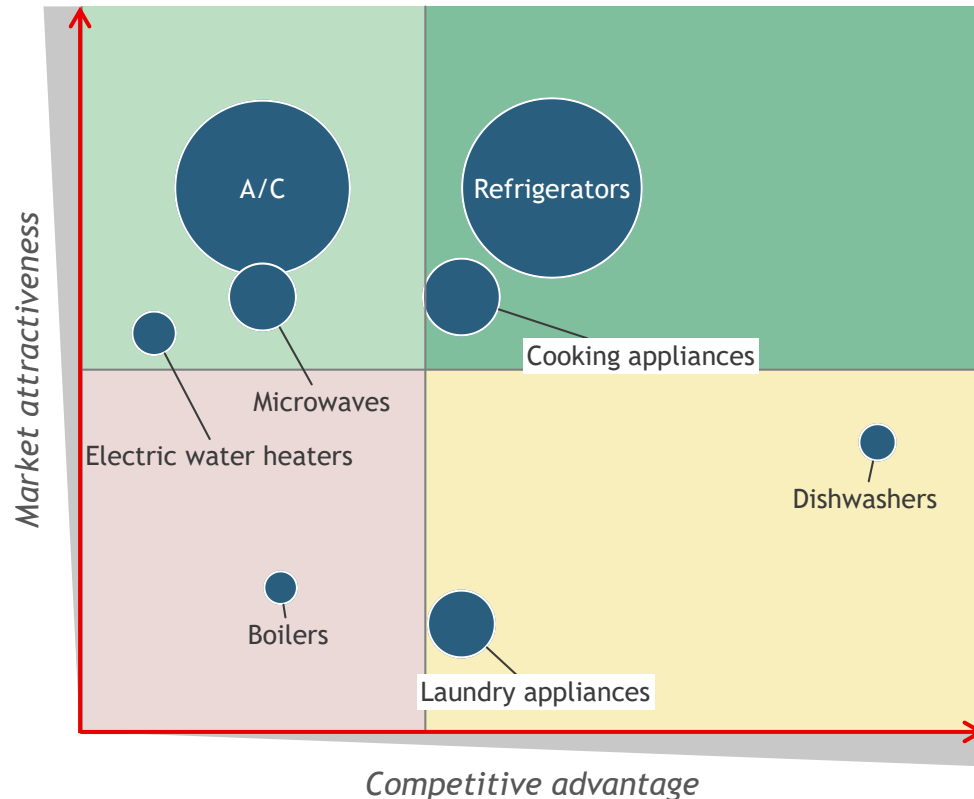


# Refrigerators and A/Cs prioritized products for Turkey

Turkish producers currently lag behind in product fit and brand strength

## Product prioritization

Substantial addressable market in **refrigerators** and **air conditioners** where Turkey is highly competitive



1. Household

Source: International Trade Centre; expert interviews; BCG analysis

## Product mix analysis

Exports to the US (\$M)

Sub-products  
not exhaustive

	Mexico	China	S. Korea	Turkey
<b>Refrigerators</b>	<b>4,630</b>	<b>2,593</b>	<b>1,110</b>	<b>227</b>
☆ Household fridge freezers	3,282	800	964	100
Refrigeration equipment	618	416	33	0
Parts	379	255	48	12
Display counters	269	368	48	14
☆ Freezerless refrigerators	40	390	13	56
<b>Air conditioners</b>	<b>3,834</b>	<b>3,292</b>	<b>346</b>	<b>3</b>
Parts	2,542	978	299	2
A/C with refrigeration unit	853	494	11	0
☆ Window or wall A/C	60	1,566	32	0

## Competitive analysis

Product	Strengths	Weaknesses
Household fridge freezers A/C parts	NAFTA Proximity	Rising US' protectionism
Household fridge freezers Window or Wall A/C	Low labor costs Economies of scale	Lower quality perception US-China trade relations
Household fridge freezers	Presence in all segments and sales channels	Lower quality perception Increased tariffs on exports
Household fridge freezers	Quality & value-for-money High energy efficiency	Product mismatch Low brand strength in the US Distance & logistics

TAIK





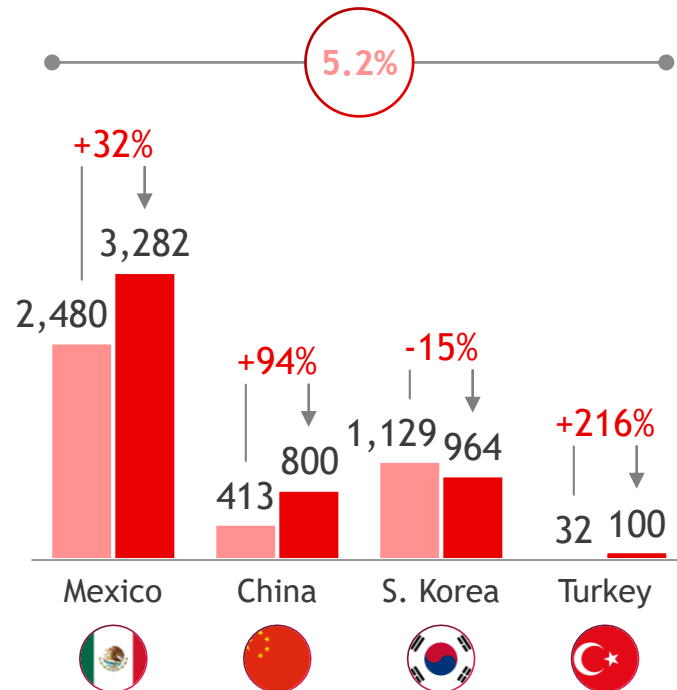
# Turkey's recent growth in exports of prioritized products shows that initial steps have been taken but further effort is required

## Export performance of Turkey vs. key competitors in prioritized products

(X%) US total import market CAGR<sup>1</sup> (13-18) for a given product

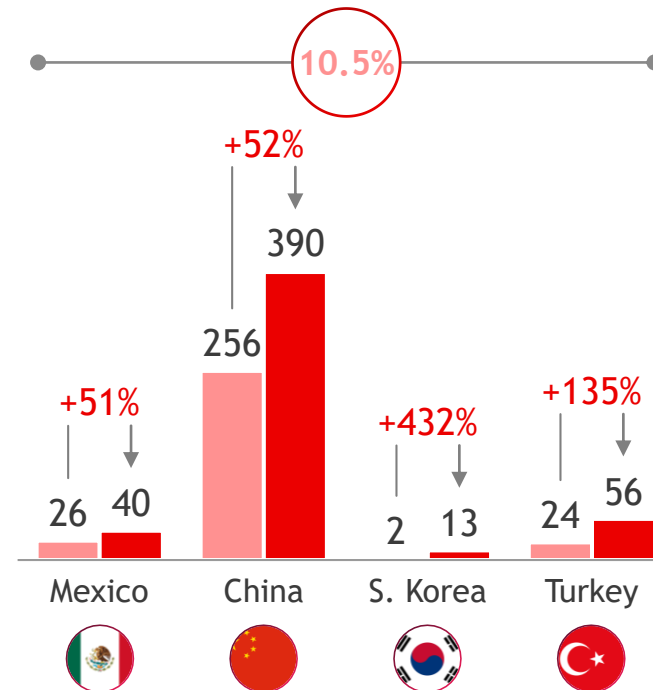
### Household fridge freezers (\$M)

2013 2018



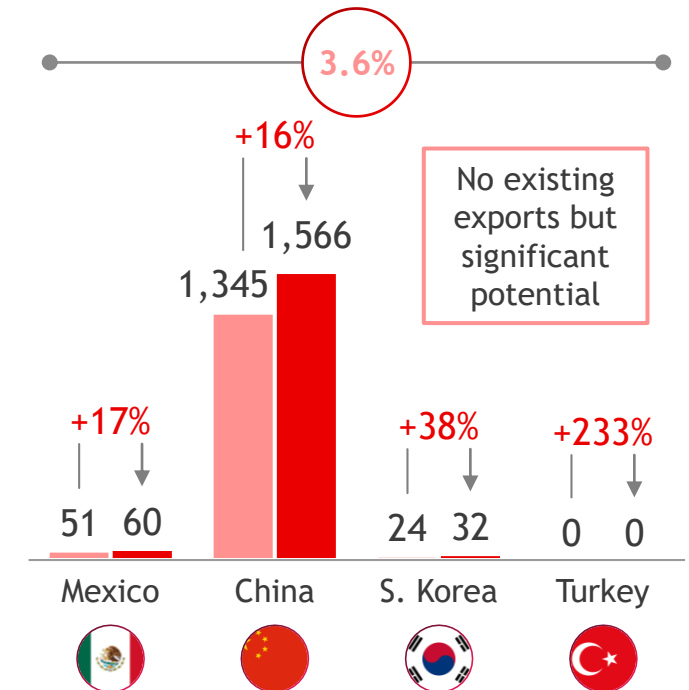
### Freezerless fridges (\$M)

2013 2018



### Window or wall A/C (\$M)

2013 2018



1. Compounded annual growth rate  
Source: International Trade Centre; BCG analysis

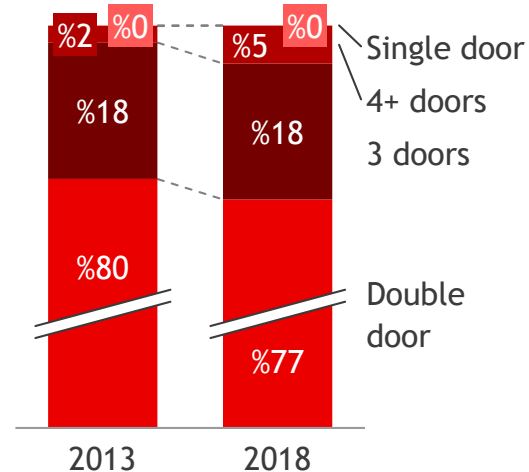


# Mismatch between Turkish products and American consumer demand requires further commitment and investment focusing on the US market

Trend towards larger fridge freezers with higher number of doors in the US; Turkey needs to adapt



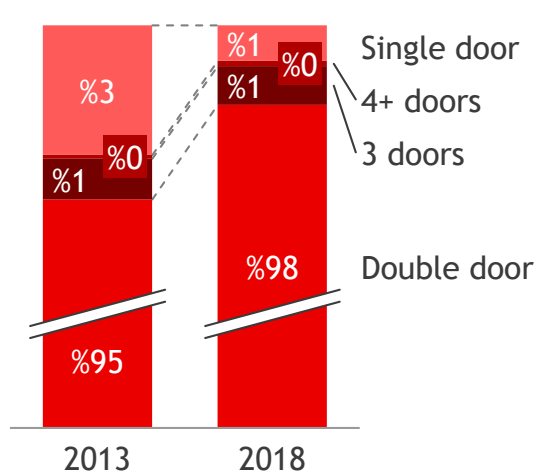
Sales of household fridge freezers by format in the US (% of vol.)



Shift from double door to 3+ doors



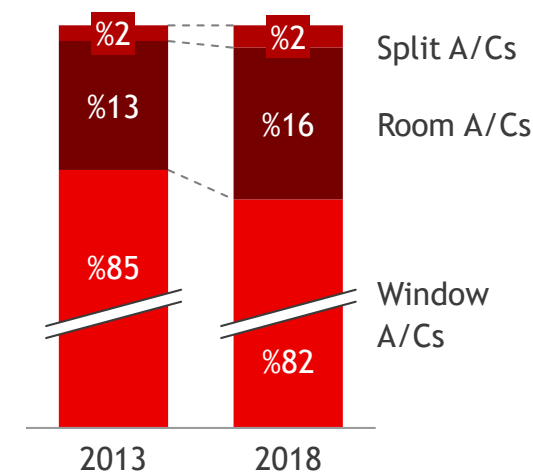
Sales of household fridge freezers by format in Turkey (% of vol.)



Shift from single door to double door



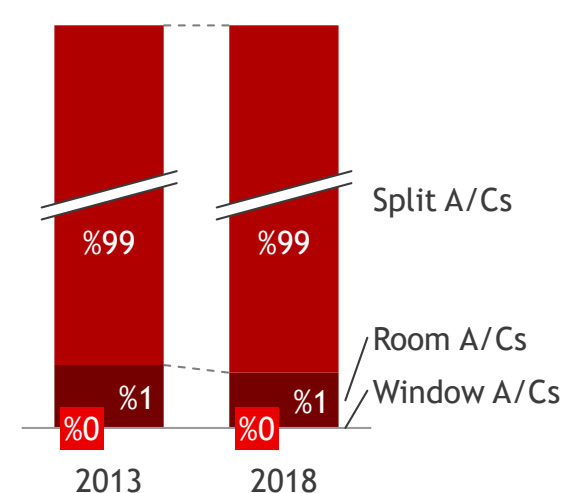
Sales of A/Cs by type in the US (% of vol.)



Window & room A/Cs dominate the market



Sales of A/Cs by type in Turkey (% of vol.)



Split A/Cs dominate the market



Although some risks exist, opportunities should inspire Turkish exporters to focus on the US white goods market



## Risks



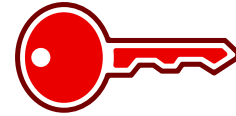
Marginal negative effect of **loss of GSP**; tariff on A/Cs up from 0% to 1%



Protectionism and "**Made in USA**" campaign, effective especially in Midwestern USA



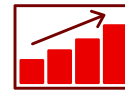
**Investment requirement & production ramp-up period**; risk of losing opportunity to competitors such as Thailand and Malaysia



## Opportunities



Turkish white goods are high quality and good value-for-money; **high potential in fridge freezers** through product matching and effective branding and marketing



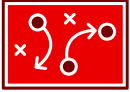
Although relatively smaller in market size, **opportunity to capture China's dominant position in freezerless fridges**, as Turkey currently holds the second place



**Opportunity to capture share of wallet from China's dominance in the window A/C market** by product matching and leveraging US-China trade developments



# Key recommendations for white goods

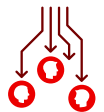


## Key recommendations



### Focus on product matching

- **Invest in manufacturing** larger double door refrigerators, refrigerators with multiple doors and window A/Cs in order to match US market demands
- **Aim for technological improvements** that American consumers give importance to, e.g. noise reduction, faster cooling cycles, even heat distribution that
- **Provide multifunctional features** such as convertible compartments in fridge freezers

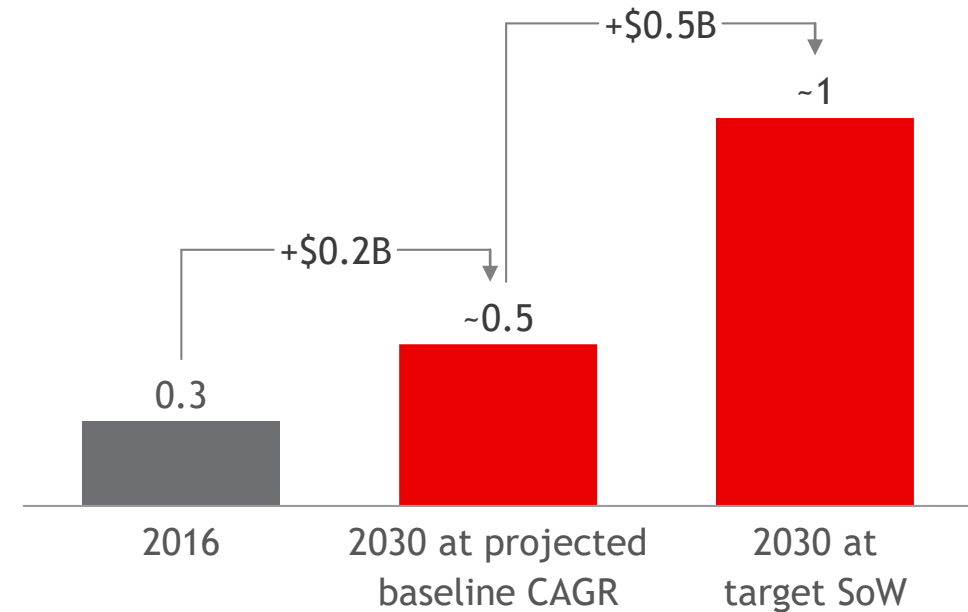


### Set a task force by key biz. associations (e.g. BEYSAD<sup>2</sup>) to identify opportunities by capturing Chinese share of wallet

- List sub-sectors and products to focus on
- Interact with key OEMs and potential buyers in the US market



## Potential upsides



1. Turkey's 2030 baseline is projected at 50% of 2011-2018 CAGR; targeted 2030 share of wallet (SoW) is three times the 2018 SoW

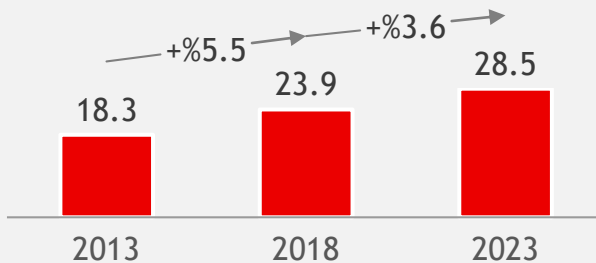
2. BEYSAD (White Goods Suppliers Association)

Source: International Trade Centre; Mintel; Euromonitor; expert interviews; BCG analysis

# Building Materials: Strong position in cement & marble create opportunities; ceramic tiles shows potential

## Market overview

US building materials imports (\$B)



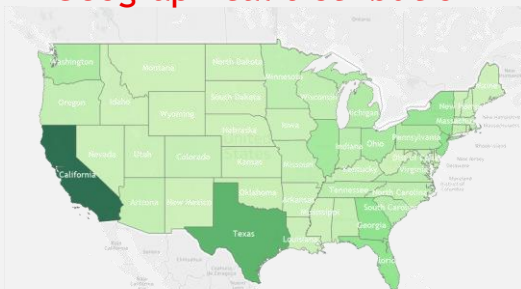
## Top importers

ARIZONA TILE

anatolia  
TILE + STONE



## Geographical distribution



## Product prioritization<sup>1</sup>

Prioritized segments:

- Cement
- Marble
- Ceramic Tiles

Selected products' exports to the US (\$B)

Key strength

China	1.2	Economies of scale
Italy	1.2	Brand image
Spain	0.6	Service level

## Key risks & opportunities

- Expected increase in US cement imports due to infrastructure boom
- Marble exports of China up for grabs due to trade developments
- Untapped potential in ceramic tiles
- Increasing construction costs to slow down growth

## Key recommendations



Ensure access to import terminals in the east coast of the US for cement exports



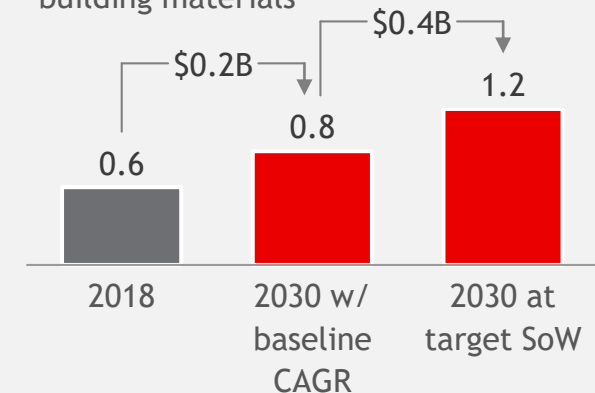
Improve brand image and country positioning in ceramic tiles segment



Attract US marble buyers sourcing from China

## Upside potential

Turkey can capture ~\$0.6 B<sup>2</sup> in building materials

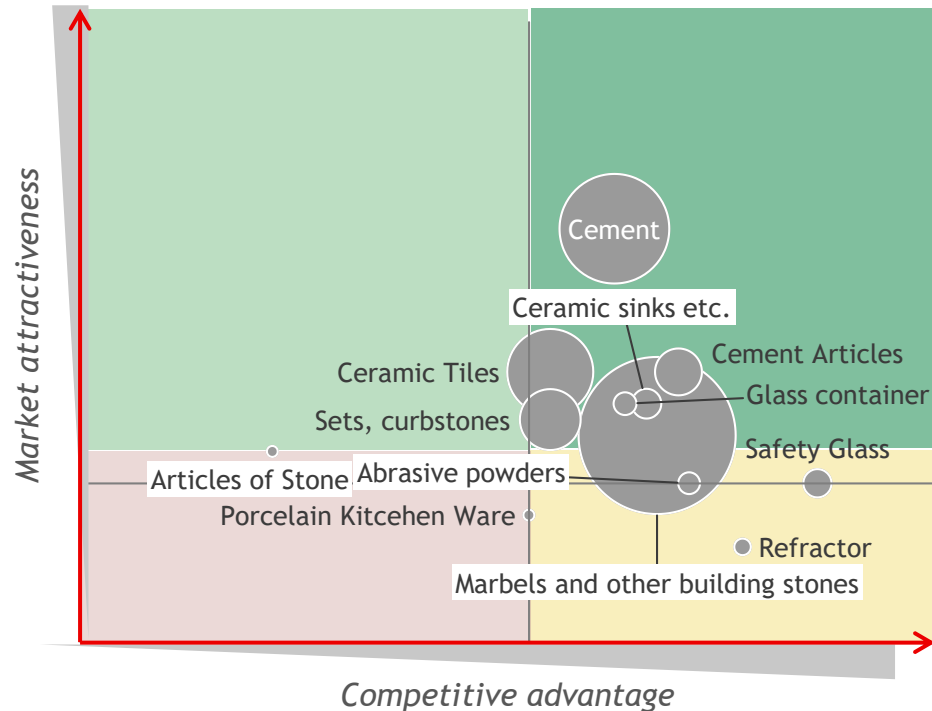


1. On 4-digit HS code level 2. Turkey's 2030 baseline is projected at 50% of 2011-2018 CAGR; additional upside potential is calculated based on the expected SOW capture in prioritized segments in addition to baseline growth

Source: International Trade Centre; expert interviews; BCG analysis

# Turkey lags behind Italy and Spain in country image and lead time

## Product prioritization



## Main competitors

### Product



China



Greece



Italy



Spain



Turkey

Cement

0.1

0.1

0.2

Ceramic Tiles

0.6

0.7

0.3

0.1

Building stones

0.7

0.5

0.3

└ Marble &amp; travertine

0.3

0.3

0.3

## Competitive analysis

### Product

### Strengths

### Weaknesses



All

Scale  
Diverse product portfolio

Low brand awareness



Cement

Cost competitiveness

Weak domestic market

Ceramic Tiles & Marble  
- Travertine

Brand image  
Superior design

Cost competitiveness



Ceramic Tiles

Short lead time to  
market

Follower in design &  
technology



# Infrastructure boom and untapped potential in ceramic tiles presents main opportunities; expected economic downturn poses a risk



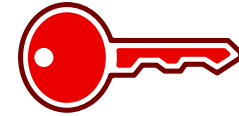
## Risks



Building materials sector influenced heavily **by economic activity**. Likely economic downturn in the US would negatively affect imports



**Increasing construction costs** may halt construction growth; slowing down the building materials sector



## Opportunities



**Infrastructure boom** in the US expected to double US cement imports



Substantial room for growth in ceramic tiles exports to the US



**Chinese marble exports up for grabs** due to trade developments

- natural stones sector is part of the products hit by recent 25% tariffs

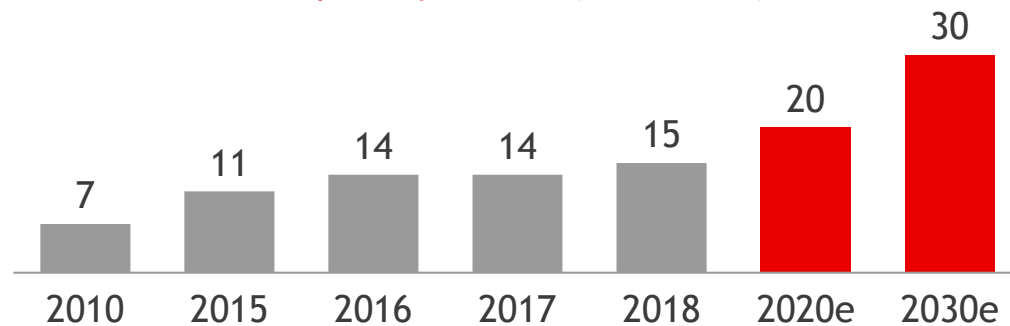




# US cement import will double by 2030 due to infrastructure boom

## Infrastructure investments will boost cement imports

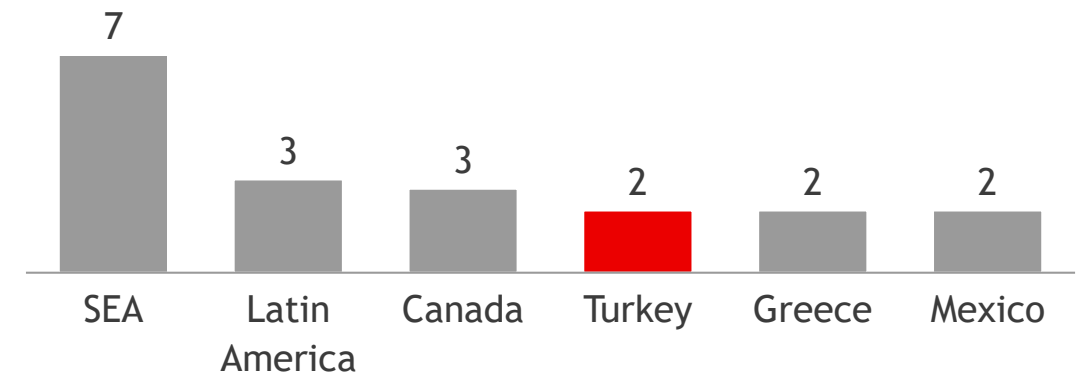
Annual cement import by the US (mn tonnes)



- The US administration plans to invest ~ \$1 T in infrastructure investments creating additional demand
- Current industry utilization rate is ~80% and the likelihood of major greenfield investment estimated to be low, promising significant opportunity for imports

## Turkey is expected to export additional 2 mn tonnes p.a. by 2030

Increase in exports to the US by countries (mn tonnes)



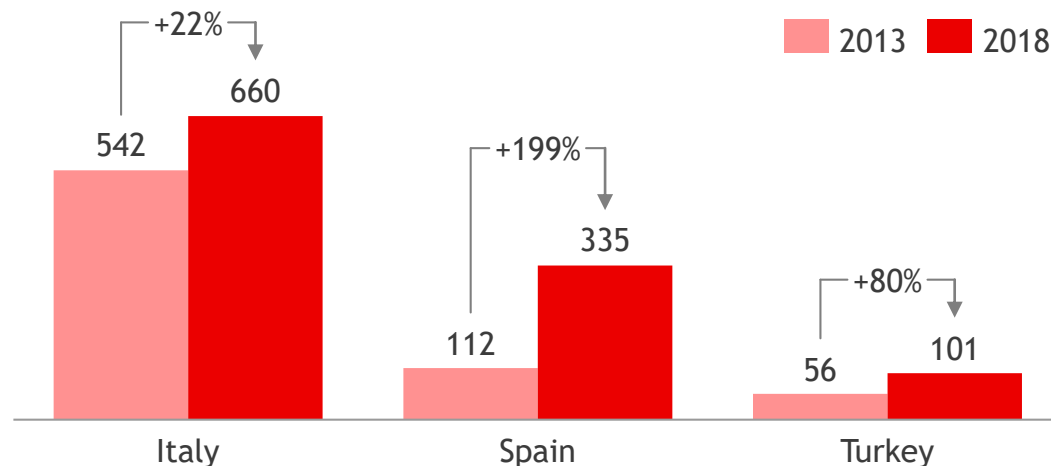
- Countries from SEA, Europe and Latin America will cover significant part of the cement supply gap
- Cement price level will rise due to the significant demand upkeep
- Access to terminals in the US is key to increasing exports



## Opportunity to capture share in ceramic tiles from Italy and Spain with enhanced product image; Chinese share is up for grabs in cost-competitive segment

Grab share from Italy and Spain by focusing on product image & service level

Ceramic tiles import by US (USD mn)



### Key Success Factors



- **Country Image:** Higher brand image in key decision influencers

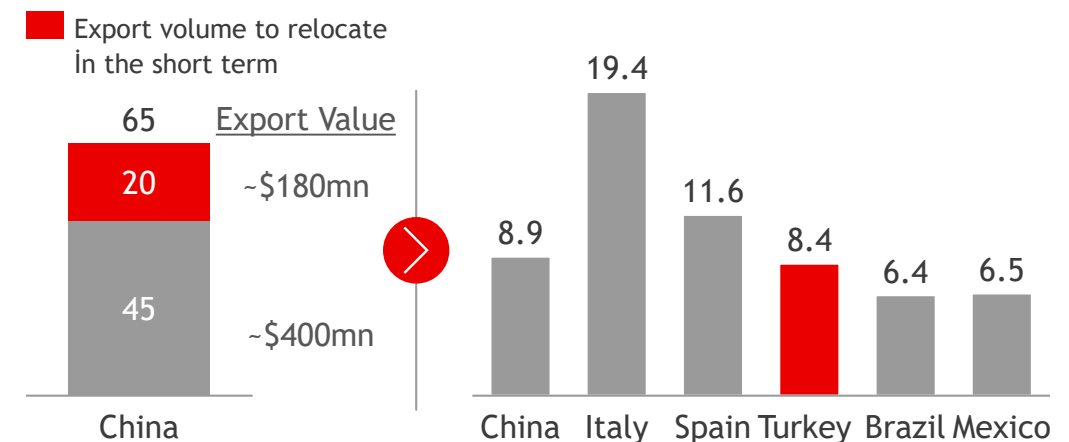


- **Service Level:** Shared logistics backbone to service small batch orders with short lead times

Chinese ceramic tiles exports are up for grabs; Turkey's unit price provides good fit with Chinese exports<sup>1</sup>

Chinese Exports to US - 2018 (mn sqm)

Average ceramic tile unit price - 2018 (\$k per thousand sqm)



### Key Success Factors

- **Capacity:** Ability to produce and deliver large orders

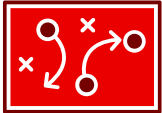


- **Quality:** Consistency of quality in large order is the key differentiator among the buyers

1. Country export product profiles should be further examined at IHS 10 product level  
Source: International Trade Centre; expert interviews; BCG analysis



# Key recommendations for building materials



## Key recommendations



Ensure access to import terminals in the east coast of the US for cement export

- Relevant association (e.g. TCMB<sup>1</sup>) to set up a sector wide organization to act as a vehicle to organize cement exports by pooling sector resources to gain access to terminals in the east coast



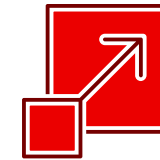
Improve brand image and country positioning in ceramic tiles segment

- Relevant biz. association (e.g. SERFED<sup>1</sup>) to set up a PR and marketing campaign targeting US architects to promote Turkish ceramic tiles
- Set up Turkish pavilion in ceramics fairs in the US with side events to showcase and promote Turkish ceramics and to ensure quality of representation by Turkish exhibitors
- Establish design academy to train specialist designers for ceramic tiles sector
- Set up a structure to enable pooling logistics of smaller size orders from different producers in Turkey by US wholesalers

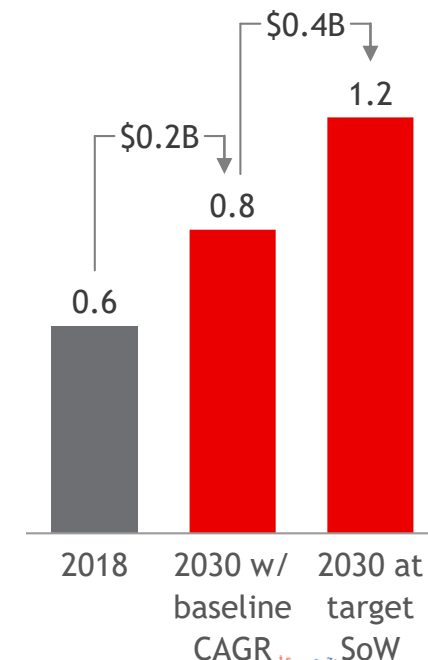


Attract US marble buyers from China

- Relevant biz. association (e.g. TUMMER<sup>1</sup>) to identify buyers to target in the US market
- Organize individual visits to key US buyers with sector players



## Potential upsides

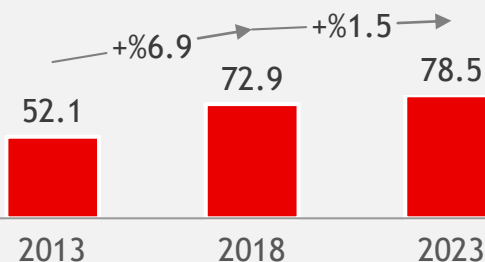




# Furniture: Turkey has a tiny share in a huge market; seats and furniture show some potential

## Market overview

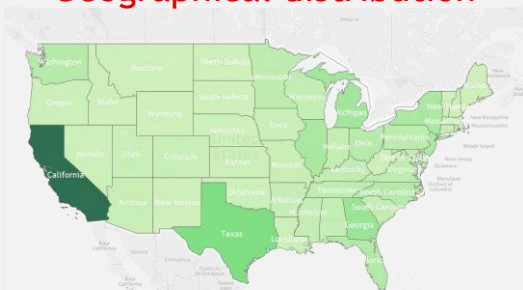
US furniture imports (\$B)



## Top importers



## Geographical distribution



## Product prioritization<sup>1</sup>

Prioritized segments:

- Furniture (excl. seats)
- Seats

Selected products' exports to the US (\$B)

Key strength

China	24.3	Economies of scale
Italy	2.1	Superior brand image
Poland	0.5	Government support

## Key risks & opportunities



Huge market is up for grabs from China due to trade developments



Potential to capture SOW from European peers

## Key recommendations



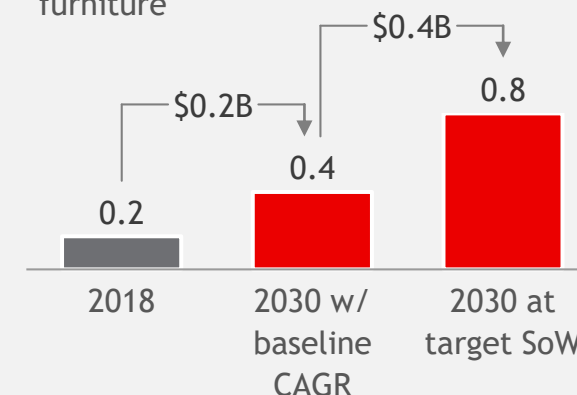
Target US buyers in preselected sub-segments to replace Chinese exports



Help SMEs develop capabilities to compete with other European producers in design, quality, and logistics

## Upside potential

Turkey can capture ~\$0.6 B<sup>2</sup> in furniture



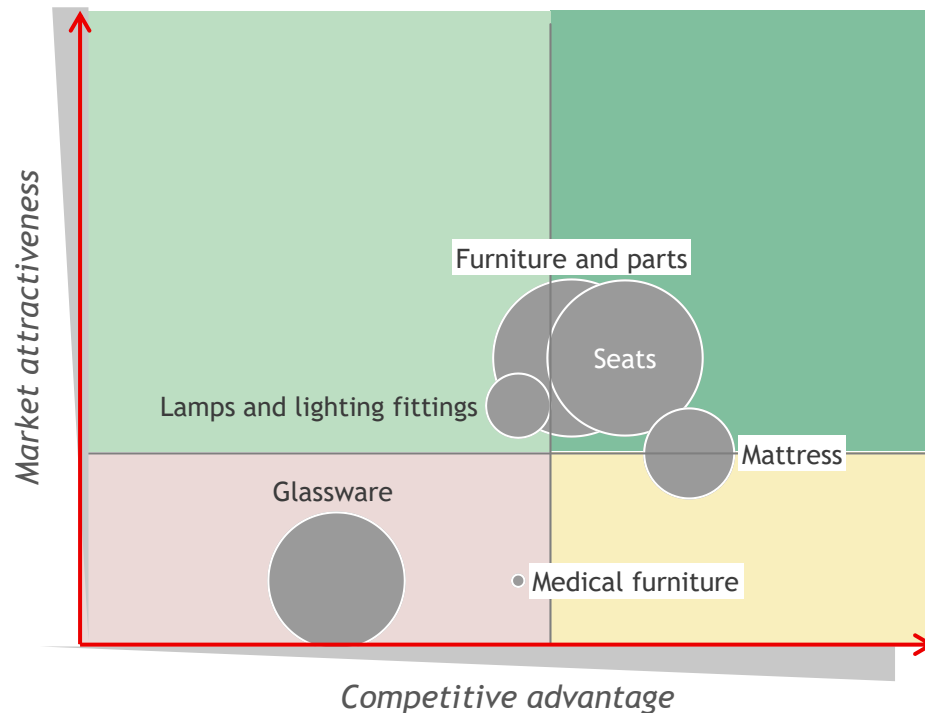
1. On 4-digit HS code level 2. Turkey's 2030 baseline is projected at 50% of 2011-2018 CAGR; additional upside potential is calculated based on the expected SOW capture in prioritized segments in addition to baseline growth  
Source: International Trade Centre; expert interviews; BCG analysis



# Turkey has substantial room to grow its exports in furniture and seats

Focusing on brand and quality is the key to compete with European peers

## Product prioritization



## Main competitors

### Product



China



Italy



Poland



Turkey

### Seats

10.6

0.3

0.1

0.03

### Furniture & parts

13.7

1.8

0.4

0.03

## Competitive analysis

### Product



Furniture & seats

### Strengths

Economies of scale  
Success in attracting FDI

### Weaknesses

Low brand image  
Inc. labour cost



Furniture & seats

Brand image  
High quality level

Low number of large  
scale producers



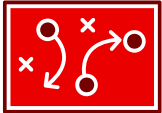
Furniture & seats

Strong state support  
Specialized workforce

Lack of strong brands  
Rising labour costs



# Key recommendations for furniture



## Key recommendations



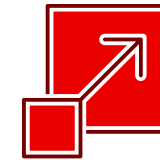
Target US buyers in preselected sub-segments to replace Chinese exports

- Relevant biz. association (e.g. TORID, MOSFED)<sup>1</sup> to set-up a working group to identify key products with potential to replace Chinese suppliers to the US market
- TAIK to help Turkish producers to reach out US buyers via site visits in both US and Turkey
- TIM to lead creation of targeted promotion campaign in key trade fairs to position Turkey as an alternative value for money segment to substitute China

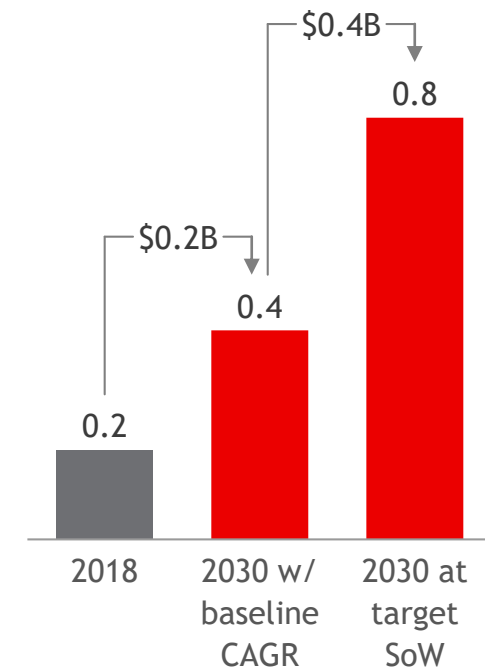


Help SMEs to develop capabilities to compete with other European producers

- Relevant biz. association (e.g. TORID, MOSFED) to set up a working group to identify customer preferences and trends
- Set up a structure to promote Turkish brands and furniture in the US via targeted PR Establish specialized programs under industrial design faculties for furniture design to improve local talent
- Create joint local logistical solutions to enable SMEs fulfil small-scale orders with shorter lead time



## Potential upsides



1. TORID (Turkey Forest Products Manufacturers Association), MOSFED ( Furniture Associations Federation)  
Source: International Trade Centre; expert interviews; BCG analysis

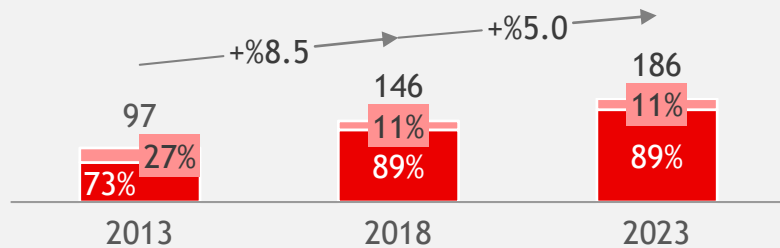


# Travel & tourism: Significant upside potential in culture, sun & beach, and healthcare tourism

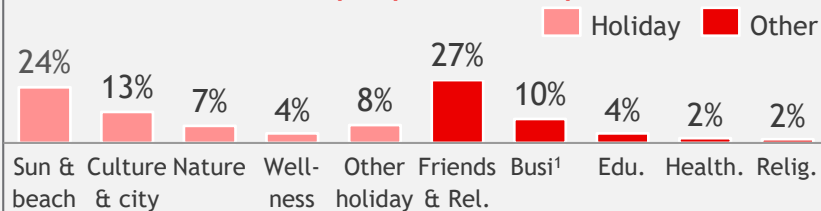
## Market overview

US T&T imports from world (\$B)

Business<sup>1</sup> Leisure



## Main purpose of trip



## Destinations of travel



## Prioritization of travel types



Culture & city trips



Sun & beach



Healthcare

Exports of the above to the US (\$B)

Key strength

Spain



Sun & beach

Greece



Culture & city

## Main opportunities & risks



Cost comp. via curr. depreciation



Rich cultural heritage



Variety in beach tourism offerings



Advanced healthcare infrastructure



Security concerns



Ineffective marketing & country PR



Low levels of skilled labor in T&T<sup>2</sup>

## Key recommendations



Manage security concerns through proactive communication with the US government officials and international rating authorities



Publicize the diversity of cultural destinations in Turkey by leveraging American media productions and social media influencers



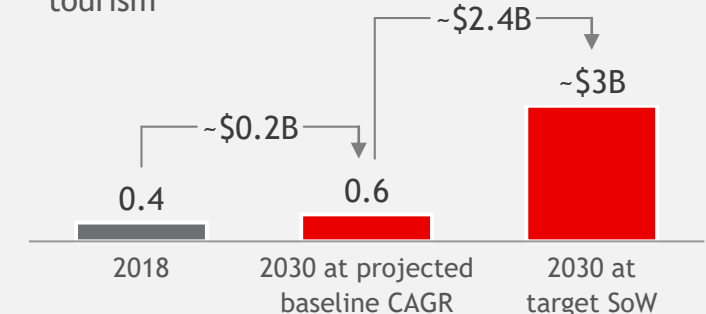
Increase the number of blue flag beaches, leverage American media productions for marketing, invest in T&T<sup>2</sup> labor to assure end-to-end customer satisfaction



Bundle health & vacation, use digital channel and local communities for market access

## Upside potential

Turkey can capture ~\$2.6B<sup>3</sup> in travel & tourism



1. Includes conventions, conferences, trade fairs 2. Travel & tourism Source: International Trade Centre; expert interviews; BCG analysis

3. Turkey's 2030 baseline based on 3% CAGR, target based on Turkey's fair share in US imports.



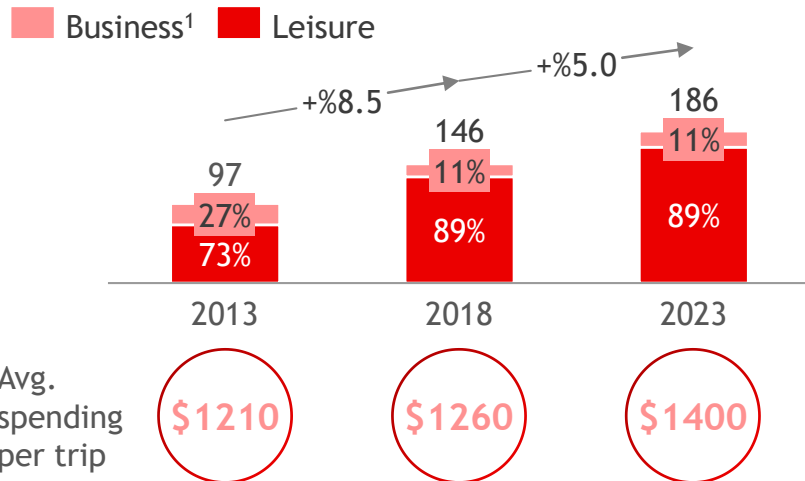




# Turkey competes primarily with Mediterranean countries in relevant T&T categories

## Market overview

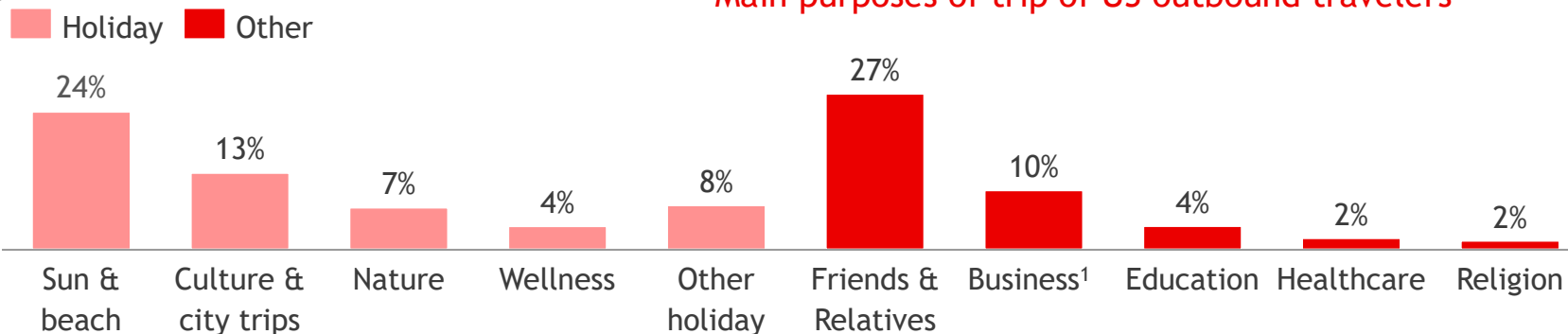
US travel & tourism imports from world (\$B)



## Destinations of travel



## Main purposes of trip of US outbound travelers



Traveling for friends/relatives, education and religion not addressable for Turkey

1. Includes conventions, conferences, trade fairs

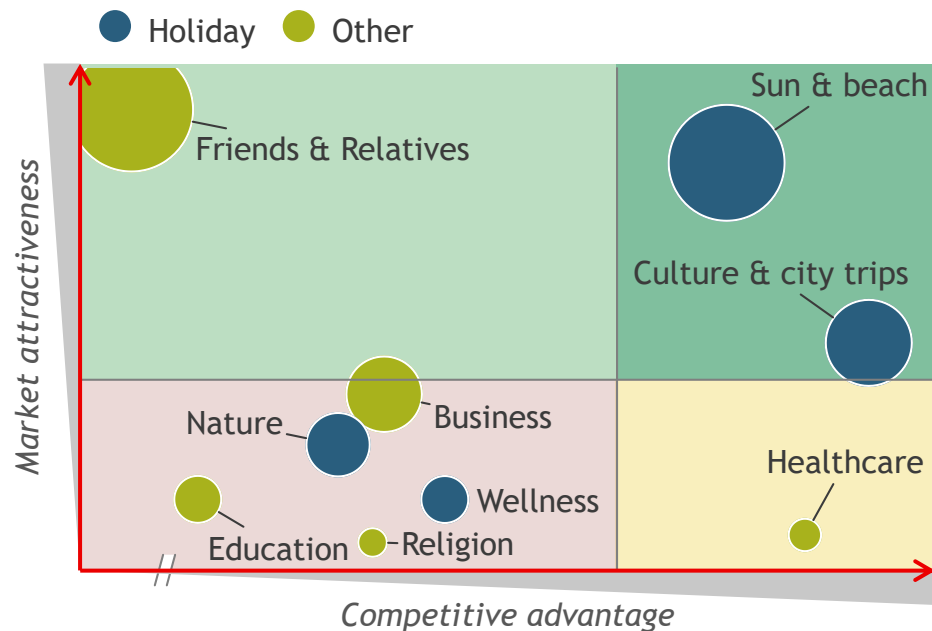
Source: Euromonitor; US National Travel & Tourism Office; Statista; BCG analysis



# Turkey can outperform its competitors in culture & city, sun & beach, and healthcare tourism by improving factors affecting all travel types

## Prioritization of travel types












- Very high potential in **culture & city trips** through key improvements; Turkey's strongest suit
- Substantial addressable market in **sun & beach** tourism where Turkey is competitive
- Turkey's competitive advantage could be leveraged to capture the small but niche **healthcare tourism** market



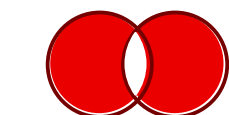
## Competitive analysis

Comparative scoring of countries by travel types (5: Highest)

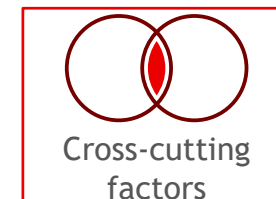
   Main strength

								
	Turkey	Spain	France	Italy	Croatia	Greece	Lebanon	Egypt
 Culture & city trips	<span style="border: 1px solid red; padding: 2px;">3.5</span>	4.2	<span style="border: 1px solid red; padding: 2px;">3.8</span>	<span style="border: 1px solid red; padding: 2px;">3.5</span>	<span style="border: 1px solid red; padding: 2px;">3.7</span>	<span style="border: 1px solid red; padding: 2px;">3.9</span>	<span style="border: 1px solid red; padding: 2px;">3.2</span>	<span style="border: 1px solid red; padding: 2px;">3.4</span>
 Sun & beach	3.3	<span style="border: 1px solid red; padding: 2px;">4.3</span>	3.4	3.0	2.7	3.8	2.4	2.5
 Healthcare	3.4	3.9	3.6	3.2	3.4	3.6	2.7	2.6

Potential uplift of T&T exports to the US mainly through improvement of cross-cutting factors



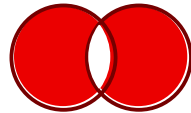
Factors specific to travel types



Cross-cutting factors



Although Turkey has strong fundamentals in main T&T types, non-satisfactory performance in cross-cutting factors prevent Turkey from achieving its full potential



## Factors specific to travel types



Culture & city



### Cultural richness

- Number of cultural World Heritage sites
- Number of Intangible Cultural Heritage elements



Sun & beach



### Richness in offerings

- Number of blue flag beaches
- High number of 5-star hotels and resorts (~600), third in the world after China and Mexico; and outperforming Spain, Italy and Greece
- Mainly located in Antalya and sun & beach destinations

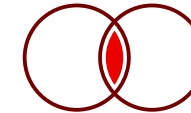


Healthcare



### Healthcare service level

- Physician quality
- A+ hospital infrastructure and tech.
- Cost-effectiveness



## Cross-cutting factors



### Safety and security

e.g. index of terrorism incidence



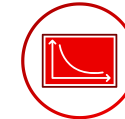
### T&T marketing and country PR

e.g. effectiveness of marketing and branding to attract tourists



### International openness

e.g. visa requirements



### Price competitiveness

e.g. purchasing power parity



### Air transport infrastructure

e.g. available international seat-kilometers












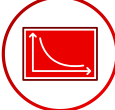




### Tourist service infrastructure

e.g. number of hotel rooms

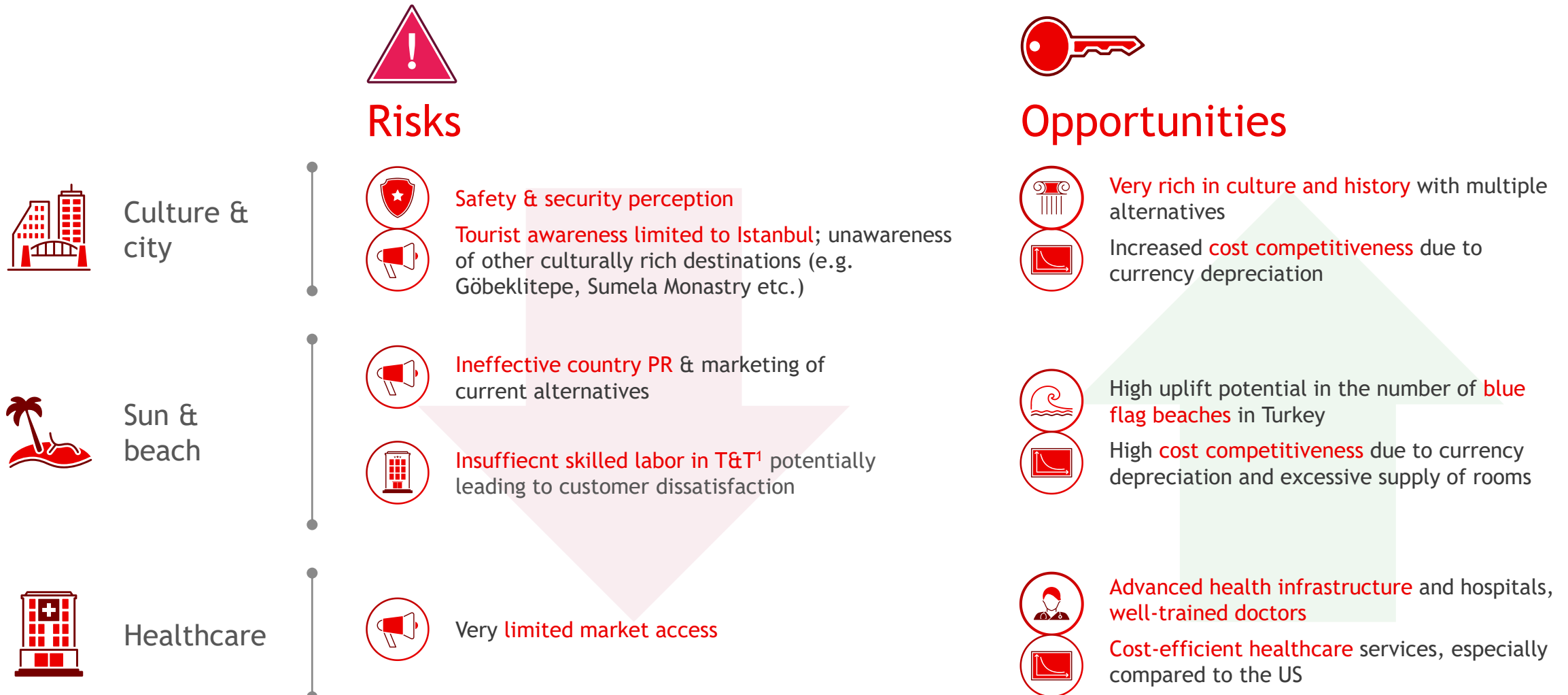


# Strong potential in Turkey's T&T sector can be achieved with effective PR and targeted marketing

Primary areas of improvement for Turkey	Group average								
		Turkey	Spain	France	Italy	Croatia	Greece	Lebanon	Egypt
 Safety and security perception	2.8	1.6	4.5	3.0	3.0	4.3	3.5	1.3	1.2
 T&T marketing and country PR	3.7	2.5	4.9	4.2	2.8	2.7	4.6	4.1	3.9
 International openness	3.5	3.5	3.8	4.5	4.2	4.3	4.1	2.1	2.0
 Price competitiveness	2.7	3.0	2.1	1.5	1.4	2.1	2.4	4.2	5.0
 Air transport infrastructure	4.0	4.6	4.8	4.6	4.3	3.5	4.3	2.6	3.3
 Tourist service infrastructure	4.1	3.8	5.0	4.5	4.7	4.9	4.5	3.1	2.3



# While low performance on cross-cutting factors pose risks, Turkey's strong fundamentals promise great opportunities



1. World Economic Forum Competitiveness Index, "Ease of finding skilled employees"  
Source: BCG analysis



## Turkey needs to focus on effective communication with relevant authorities to address security perception and leverage new channels to publicize its rich and diverse offering



Proactively communicate reduced security risks to US government and international rating authorities



### US Bureau of Consular Affairs

Currently classifies Turkey as a **risky** travel destination



### International SOS

Currently classifies Turkey's travel security risk as **medium**



### World Economic Forum

Ranked Turkey **116<sup>th</sup>** in **safety and security** among 136 countries in its latest 2017 report



Leverage strong Turkish brands, tourism partnerships and media to improve T&T marketing and country PR



### Turkish Airlines

Leverage the Turkish Airlines brand for marketing and cross-sell tourism with connecting flights



### US tour operators

Partner up with the biggest tour operators in the US to attract large groups



### Netflix

Contact Turkey representative of Netflix in order for some productions to take place in Turkey



### MTV Awards

Proactively pursue to host MTV Awards to reach millions of Americans



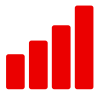
### Celebrities & social media influencers

Reach out to celebrities & social media influencers and host them in Turkey for marketing





# Healthcare tourism focus: Turkey should attract more tourists from the US for healthcare services



## Sizeable and growing healthcare tourism in the world:

- Market size of **\$37 billion** and expected **CAGR of 20%** for the foreseeable future
- Medical tourism expected to exceed **\$100 B** in revenue within the next five years



## Reversing trend from developed to developing world:

- Previously, influx was from developing to developed world for higher quality healthcare
- Healthcare tourism industry is increasingly dominated by **affordable healthcare in developing countries**



## Turkey has significant potential in affordable healthcare tourism:

- High-quality affordable healthcare; among top 10 health tourism destinations in the world
- **~\$1.5 B** annual revenue from healthcare tourism



## US is an attractive market for Turkey, yet its potential unfulfilled:

- Most expensive healthcare system in the world and the largest supplier of healthcare tourists
  - **~\$10 K** per capita in healthcare spending
  - **1.4 M** healthcare tourist outflow per annum from US
- Turkey has a relatively low market penetration in US healthcare tourism
  - US ranks only **24<sup>th</sup> in country of origin** for healthcare tourists in Turkey





# Healthcare tourism focus: Turkey is one of the most cost-competitive countries


India is the only country with lower costs but cannot match Turkey' service level


Values in \$K		 USA	 Turkey	Competitor Average	 Mexico	 Costa Rica	 Colombia	 India	 Malaysia	 Thailand
 Cardiac	Heart Bypass	123,000	13,900	17,300	27,000	27,000	14,800	7,900	12,100	15,000
	Angioplasty	28,200	4,800	8,200	10,400	13,800	7,100	5,700	8,000	4,200
 Orthopaedic	Hip Resurfacing	28,000	10,100	12,000	12,500	13,200	10,500	9,700	12,500	13,500
	Knee Replacement	35,000	10,400	11,500	13,000	12,500	15,000	6,500	8,000	14,000
 Cosmetic	Rhinoplasty	6,500	3,100	3,300	3,800	3,800	4,500	2,400	2,200	3,300
	Hair Transplant	12,000	1,500	3,750	4,000	4,000	2,000	1,500	7,000	4,000
 Ocular	Lasik	4,000	1,700	2,200	1,900	2,400	2,400	1,000	3,450	2,310
	Cataract	3,500	1,600	2,000	2,100	1,700	1,600	1,500	3,000	1,800





# Healthcare tourism focus: US promises significant opportunities for Turkey

Turkey is globally competitive in healthcare tourism...


 5<sup>th</sup> highest # of JCI-accredited hospitals in the world


 Among highest healthcare operation success rates in developing world


 Cost-competitive in majority of the 20 most common ops.


 Attractive holiday destination due to variety of travel sights

...but faces competitive disadvantages when serving American patients


 Lower % of English speaking care personnel than Asian competitors


 No well-developed medical malpractice litigation

 Further away from the U.S. than Latin American competitors


 Not covered in most U.S. health insurance systems

Turkey should sharpen its competitive edge by capitalizing on strengths and addressing weaknesses

 Design language training programs for care personnel

 Develop medical malpractice litigation

 Lobby U.S. insurance companies to cover operations in Turkey

 Design travel packages combining leisure with healthcare services

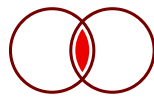




# Key recommendations for travel & tourism



## Key recommendations



Cross-cutting factors



Manage security perception through **proactive communication** with the US government and international rating authorities



Culture & city



**Increase and diversify US citizens' awareness** on cultural & historical destinations in Turkey (e.g. Göbekli Tepe, Sumela Monastery) by leveraging American media productions and social media influencers



**Increase marketing effectiveness** by utilizing THY synergies, partnering with US tour operators, addressing US media productions and social media



Sun & beach



Place effort on **increasing the number of blue flag beaches**



**Create an end-to-end tourism ecosystem** assuring safety and quality from arrival to departure



Healthcare

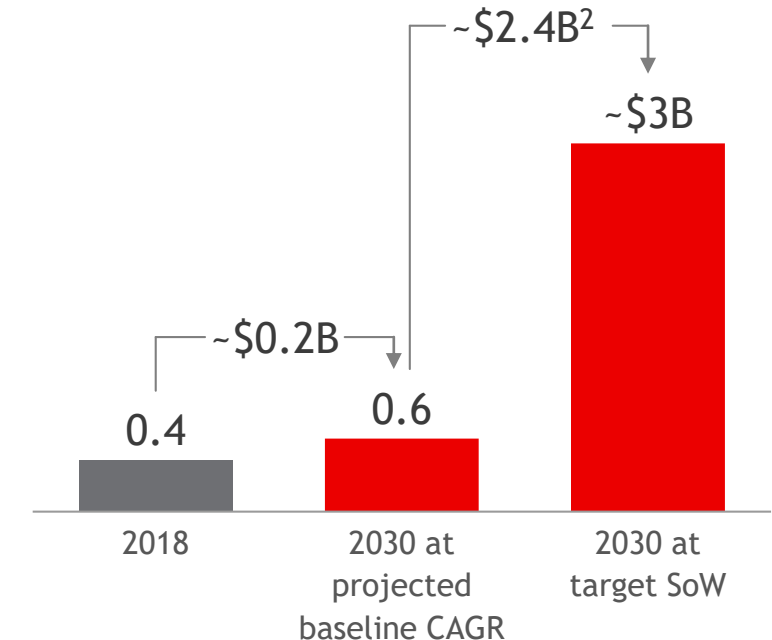


**Effective go-to-market strategy targeting local communities and utilizing digital channels** for promotion and marketing of especially dental health and hair transplantation; and bundle with vacation



## Potential upsides

Room for **~\$2.6 B<sup>2</sup>** additional export in travel & tourism



# Even though less sizeable, other opportunities also exist for Turkey in the US market



## Edible agricultural products

- Strong comparative advantages in high value add products (nuts, figs, dried fruits etc.)
- Growing demand in the US market



## Computer Games / software

- Niche services market growing in the US market
- Growing competence in Turkey
- Strong incentive structure stimulates TR market capabilities



## Marine vehicles

- Increasing comparative advantage in Turkey
- Potential to serve US market
- Other competitors in the Mediterranean region



## Food & beverages

- Turkey has strong advantage in packaged food and beverages
- Better go-to-market and logistics required for enhanced market access in the US

# Insights from key sectors indicate that Turkey needs to put more effort on multiple fronts to capture rising opportunities

Multiple opportunities exist for Turkey to be seized in the US market...



Seize opportunities rising from developments in **US-China trade relations**



Capture market share from Europeans with **balanced price, design, quality, and brand/country image**



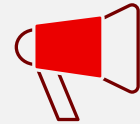
Utilize opportunities in **sub-segments / products** where Turkey has a comparative advantage but has not achieved its fair share



... which require extensive progress in four major areas



Turkish firms need to have **better business ties and go-to-market strategies**. Access to the US market needs to be facilitated via business associations and government via targeted programs



**Turkey's country image** needs to be improved via targeted campaigns to polish brand image of Turkish products and services

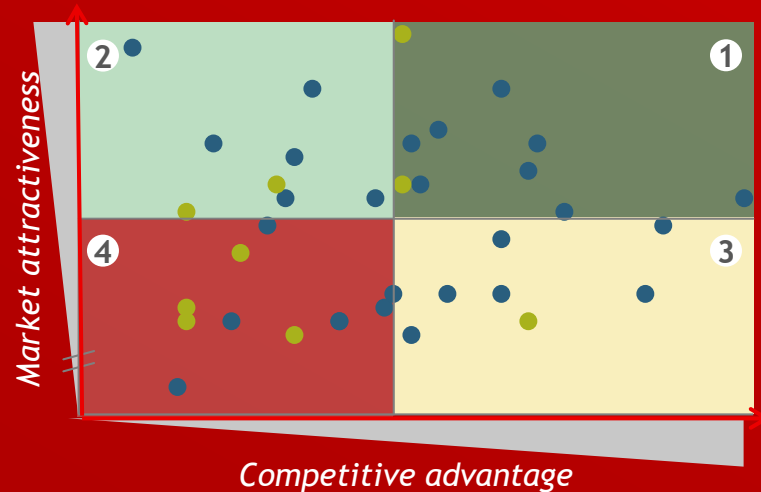


Turkey needs **to attract more FDI** (from the US and other countries) to better engage with global value chains, and increase its exports to the world and to the US



Turkey needs to optimize its **logistics structure** to better serve to the US market

We detailed  
selected sectors  
and transversal  
levers to  
increase Turkish  
exports to the US



## Sectors



Automotive  
(incl. parts)



Textile &  
apparel



Jewelry



Civil  
aerospace



White  
goods



Building  
materials



Furniture



Travel &  
tourism

## Transversal levers



Business  
facilitation



Country  
PR



FDI and Joint  
Ventures



Logistics



# Business facilitation will help the Turkish business community better penetrate into the US market

## Turkey's barriers

- Historical and cultural ties** are not as strong as with Europe and MENA<sup>1</sup> region
- Geographical distance** is a barrier
- Insufficient familiarity with US market dynamics and business culture**

## Key success factors

- Business and legal consulting**
  - Trade data coll. & analysis
  - Market research
- Training**
  - US market & target sectors
  - Business & legal aspects
- Exhibitions**
  - Increase presence in domestic, US and intl. exhibitions
- Business partnerships**
  - Business matching programs & platforms

## Competitive analysis

	Biz. & legal consulting	Training	Exhibitions	Biz. partnerships
Turkey				
Norway				
Canada				
S. Korea				
Thailand				
Malaysia				
Oman				

## Key recommendations

- Prepare a tailored business facilitation strategy for the US market including **US-specific consulting, training, exhibition and partnership strategy**
- Promote national brand in international exhibitions via culturally-themed booths to market Turkish design and quality features
- Improve business partnership facilitation via:
  - Expanding the **Turkish Trade Centers** both geographically and functionally -to be decided after sectoral meetings
  - Improve capabilities and capacity of the **Turkish commercial service / representation** in the US
  - Encourage **US and Turkey Eximbanks'** collaboration





# Existing barriers in the US market can be overcome through targeted programs

## Major barriers impede the Turkish business community's active presence in the US market



**Historical and cultural ties with the US** are not as strong as with Europe and MENA region

- Smaller Turkish community in the US
- Turkish firms and brands are less known in the US
- No FTA or CU (e.g. EU Customs Union)



**Geographical distance** is a barrier

- Costs of flying to the US, and travelling within the wider geography of the US
- Time zone difference is a challenge for handling operations



Insufficient familiarity with **US market dynamics and business culture**

- Doing business with the US firms (e.g. markets, potential business partners, establishing JVs, attracting FDI)
- Legal requirements



## Turkish exporters to the US can be supported through multiple means



**Business and legal consulting**

- Trade data collection and analysis
- Comprehensive market research
- Tailored biz. and legal consulting



**Training**

- On the US market and target industries
- On business and legal aspects



**Exhibitions**

- Increase presence in domestic, US, and international exhibitions through
  - Financial support
  - Logistic services
  - National image promotion booths



**Business partnerships**












- Finding business partners
- Business matching programs
- Electronic platforms



# Summary: Country overview of export facilitation methods

## Business partnership programs emerge as the key improvement area for Turkey

✓ Topic applies to country

	Framework Topic	 Turkey	 Norway	 Canada	 South Korea	 Thailand	 Malaysia	 Oman
 Business & legal consulting	Market research	✓	✓	✓	✓		✓	✓
	Business consulting	✓	✓	✓	✓	✓	✓	
	Legal consulting	✓	✓	✓	✓	✓	✓	
 Training	Target country 101	✓	✓	✓	✓	✓	✓	✓
	Sector/market trainings	✓	✓		✓	✓	✓	✓
	SME basic skills trainings	✓	✓	✓	✓	✓	✓	✓
 Exhibition	Financial support	✓		✓	✓			
	Logistic support	✓	✓	✓	✓		✓	
	National image promotion				✓		✓	
 Business partnership	Potential biz. partner search		✓	✓	✓	✓	✓	✓
	Biz. partnership meetings		✓	✓	✓	✓		
	Biz. matching e-platforms		✓	✓	✓	✓	✓	✓

1. Key topics addressed within each country's framework

Note: List of topics not exhaustive

Source: BCG research & analysis



# South Korea stands out in the comprehensive variety of its export promotion policies



## Promotion of linkage

Business clusters encourage collaboration among academia, SMEs, and large firms

Support SMEs entering foreign markets by utilizing large firms' distribution networks

## Focus on SMEs

Legal syst. protects and promotes SMEs

Entire ministry for SMEs and start-ups

KIBO<sup>1</sup> guarantees lending to tech SMEs

## Export insurance

Comprehensive export insurance by K-SURE<sup>2</sup>

Import insurance to secure resources crucial for exports

Among highest export insurance utilization rates in world (30%)

## Fiscal incentives

Extensive duty drawback scheme

Generous export credit mechanism thru EXIM<sup>3</sup>

EPZs<sup>4</sup> with less regulations

## Global presence

120+ KOTRA<sup>5</sup> offices in 86 countries, providing market research, consulting, and buss. matching services

Logistic & financial support for int'l exhibits

## State-led digitization

Mandatory electronic issuance of all trade-related documents

Electronic customs system

Online training programs for exporters

1. Korea Technology Credit Guarantee Fund 2. Korea Trade Insurance Corporation  
3. Export-Import Bank of Korea 4. Export processing zones 5. Korea Trade-Investment Promotion Agency



# The German Center is a business incubator that offers extensive management and logistic support around the world

Founded by LBBW and Bayern LB<sup>1</sup>, the two largest regional state banks in Germany, German Center positioned as a commercial base for the German Companies in export markets

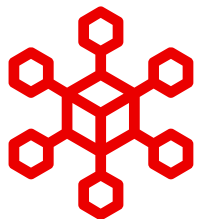


## Business support



### Business advising

- Market entry and start-up consulting
- Legal consulting
- Sparring partner for existing businesses
- Financial support and advising through LBBW and Bayern LB<sup>1</sup>



### Network facilitation

- Exchange platforms
- Networking events
- Business matching services
- Fostering relationships with experts
- Connecting with contacts in gov't agencies

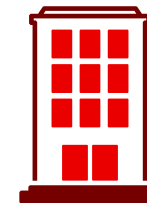


## Logistic support



### Event organization

- Event ideas and management
- Digital advertising
- Interpretation services
- Technical support
- Catering services



### Space provision

- Functional spaces, e.g. offices, exhibition areas, and parking lots
- Social spaces, e.g. cafes, reception halls, and meeting rooms
- Residential spaces, e.g. apartments

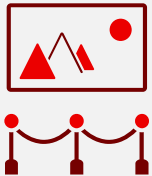
1. Landesbank Baden-Württemberg and Bayerische Landesbank, the two largest regional state banks in Germany



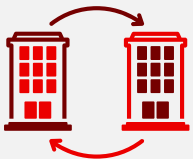
# Turkey needs to adopt a tailored approach for export promotion in the US market



Prepare a tailored business facilitation strategy for the US market including **US-specific consulting, training, exhibition, and partnership strategies**



**Promote Turkey's national brand in international exhibitions** via culturally-themed booths to market Turkish design and quality features



Improve business partnership facilitation via:

- Expanding **Turkish Trade Centers** both geographically and functionally having them serve as box office, meeting and working space, display and storage center in the US
- Improve capabilities of the **Turkish commercial service / representation** in the US (research and engagement staff for key sectors, enhanced analytical and communication services)



# Country PR activities will improve Turkey's image in the US and contribute to its exports

Key success factors & Turkey's barriers		Comparative scoring of countries (5: Highest)							
		Competitive analysis							
		TUR	POL	CZE	ROU	HUN	IND	THA	VNM
	Country brand strategy	1.6	4.1	1.3	4.0	3.4	2.6	3.0	1.9
	Business environment	3.2	3.1	3.1	2.8	2.1	2.4	3.7	3.0
	Diplomatic engagement	4.7	3.7	3.1	1.0	3.4	4.3	2.5	2.6
	Cultural influence	3.5	2.8	2.5	2.1	2.6	3.5	4.0	2.4
	Education & skilled labor	2.2	3.7	4.1	2.6	3.3	2.5	3.8	3.9
	Digital capabilities	2.9	3.7	4.3	3.3	3.4	1.7	3.3	2.7
	Safety and security perception	1.6	3.6	4.1	3.9	3.7	1.7	1.5	3.3

## Key recommendations



A **central message** should be developed, adopted and communicated by all entities, creating a coherent country image.



**Targeted campaigns** to address Turkey's image in the US and to enhance awareness of national brands. This should be orchestrated by the Ministry of Trade with relevant biz. associations and other key stakeholders



**Innovative use of digital and alternative channels** for country PR utilizing digital influencers, international awards and events, Netflix and Hollywood films, Turkish airlines etc.







# Presence of governmental bodies responsible for the development and conveying of a coherent country image is essential for effective country PR



## Centralized messaging



### Poland's centralized messaging strategy

- The Government Information Center (GIC) within the Chancellery of Prime Minister (CPM) handles communication, whereas the "social communication strategy" is defined by the Secretary of State, also under the CPM
- GIC plays a reactive role, as its role is confined to working for and answering to government spokespersons and the Secretary of State



## Targeted campaigns



### "German Year" in Brazil

- Survey to identify current negative stereotypes, select stereotypes to address (e.g. "Germans are only good at manufacturing")
- Targeted initiatives such as events and social media competitions (e.g. highlighting relatively unknown German companies in non-manufacturing sectors)
- Targeted mainly well-educated young population (students and young professionals)
- Collaborated with German embassy to establish contacts with local partners
- Contracted with German PR firm that set up partnerships with Brazilian media outlets



2013-2014  
DEUTSCHLAND + BRASILIEN  
*Wo Ideen sich verbinden*



## Countries have innovatively utilized digital channels in order to promote their image globally



### 50% increase in arrivals to New Zealand since the *Lord of the Rings*

- Currently, tourism is New Zealand's second largest industry, after dairy
- The movie industry is estimated to be ~NZD\$3 billion, of which 80-90% is contributed by the North American productions



### Georgia's strong presence on international channels

- Special issue for Georgia by National Geographic
- Showcasing of Georgia on international television programs such as CNN's "Georgia - Making Business Easy" and "9 Reasons to Visit Georgia Now"



### Estonia's "The Stress Buster" video campaign

- Promotion of Estonia's nature: "Let Estonia's pure nature relieve your stress."
- Filmed in many European cities including Stockholm, Oslo, Berlin, London
- Videos available on YouTube



# FDI & JV attraction will help increase Turkish export competitiveness

## Key success factors



Regulatory framework



Ease of business



Market size



Tax rates



Labor Costs



Skilled labor



Infrastructure

## Competitive analysis



Turkey's advantage



Turkey's disadvantage

### Central and Eastern European competitors



Poland



Czechia



Romania



Hungary



- Lower labor costs
- Larger market size



- High corporate tax rates

### Southeast Asian competitors



India



Thailand



Vietnam



- Better infrastructure
- Better access European and MENA markets



- Higher labor costs
- Weaker access to Asian markets

## Key recommendations



Prepare a holistic country FDI strategy with all key stakeholders -strategic focus on key countries and sectors (e.g. Turkey as a regional hub, protecting existing US FDI etc.)



Engage in a PR campaign to improve Turkey's international image (e.g. addressing questions of investors, organizing a large Turkey Investment Conference)



Implement simplified tax code that conforms to international standards



Invest in education and skill development with a long-term vision ( e.g. vocational schools and university-industry cooperation)



Develop strategies to integrate SMEs into the global value chain



# FDI inflow and JVs increase overall export competitiveness

FDI & JVs help stimulate economic growth and export capacity via...



Integrating local firms into global production networks



Accelerating technology transfer

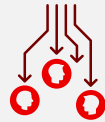


Advancing worker training and skills development



Strengthening export competitiveness

...but do not always increase trade volume between two countries



FDI & JVs usually aim:

- to access the large domestic market
- to serve nearby markets



FDI & JVs rarely intend/lead to exporting back to investor country:

- Resource-extraction as an exception (e.g. mining)
- Global value chain integration



FDI & JVs hence do not directly contribute to the volume between two countries, but contribute to the overall export competitiveness

Hence, Turkey should follow a holistic FDI strategy focusing on



Maximizing overall FDI inflow and JV attraction rather than only from the U.S.



Increasing overall export competitiveness and not just intending to boost trade with the US



# Turkey competes with both Central/Eastern European and SEA countries for FDI inflow and JVs

## Central and Eastern European competitors



Poland



Czechia



Romania



Hungary



Turkey's  
advantages

- Lower labor costs
- Larger market size



Turkey's  
disadvantages

- Higher corporate tax rates



Competes for FDI and JV opportunities  
from mainly advanced EU economies

## Southeast Asian competitors



India



Thailand



Vietnam

- Better infrastructure
- Better access to European and MENA markets

- Higher labor costs
- Weaker access to Asian markets


















Competes for FDI and JV opportunities  
likely to arise from the US-China trade  
developments



# Turkey has strong fundamentals to attract FDI and JVs, but needs to focus on improvement areas

Comparative scoring of countries (5: Highest)


	Group Average	 Turkey	 Poland	 Czechia	 Romania	 Hungary	 India	 Thailand	 Vietnam
 Regulatory framework	3.1	1.9	4.1	4.3	4.0	3.3	3.0	2.8	2.7
 Ease of business	3.5	3.9	4.1	4.1	3.6	3.6	3.0	4.3	3.2
 Market size	3.9	4.5	4.4	3.8	3.8	3.5	4.8	4.3	3.8
 Tax rates	3.4	2.9	3.7	3.7	4.0	4.7	1.0	3.6	3.6
 Labor Costs	2.4	1.9	1.5	1.1	1.6	1.5	3.8	2.2	3.5
 Skilled labor	2.5	2.6	3.5	2.8	1.5	1.5	3.7	2.6	2.6
 Infrastructure	3.5	4.0	3.9	4.2	3.4	4.1	3.4	3.7	3.5

Sources: 2019 Fragile State Index; 2. World Justice Project 2019 Rule of Law Index; 3. 2019 Ease of Doing Business Rankings; 4. Trading Economics Credit Ranking Aggregate; 5. IMF 2019 World GDP Ranking; 6. KPMG 2017 Tax Table; 7. IMF 2019 nominal GDP per capita; 8. World Economic Forum Competitiveness Index, "Ease of finding skilled employees"; 9. World Bank, Logistics Performance Index; BCG analysis




## Key recommendations for FDI and JVs

 Prepare a holistic country FDI strategy with all key stakeholders aligning on key countries and sectors

 Engage in a PR campaign to improve Turkey's country image

 Simplify tax code to conform to international standards

 Invest in education and skill development with a long-term vision, e.g. increasing the number and quality of vocational schools for blue collar workers, and improving university-industry cooperation

 Better integrate SMEs into the global value chain through business facilitation





# Logistics optimization will help the Turkish business community better serve to the US market

## Turkey's barriers



Geographical distance to the US



Development opportunity international logistical capabilities



Collaboration opportunity among sector participants

## Key success factors



Efficient infrastructure and rules & regulations



Quality logistics services with competitive pricing



Timeliness of shipment & tracking transparency

## Success stories



India

India has launched an **integrated logistics action plan** driving logistics dev. and efficiency in the country



Italy

Italian ceramic tile cluster in Sassuolo uses **shared logistic services** among SME producers to reduce min. order size and average lead time per product



UAE

Dubai provides fully integrated trade services through a **Single Window Platform** incl. integrated document processing, electronic payment gateway, electronic booking and real-time tracking



## Key recommendations



**Develop an action plan to improve logistic operations**

- Launch a comprehensive review
- Revise key acts, guidelines, and policies
- Set up a robust governance structure



**Facilitate shared logistics services among producers**

- Launch sector specific logistic serv.
- Promote sharing of logistics resources among producers
- Set up scheduled routes with dedicated capacities for key sectors



**Leverage technology across the value chain**

- Drive the digitalization of logistics services through incentives and regulations
- Leverage data and digital technology to optimize trade routes




















# Turkey has improvement potential in international logistics capabilities

European peers has substantial advantage over Turkey in all dimensions

International Logistics Performance Index (LPI) - 2018

Selected Examples

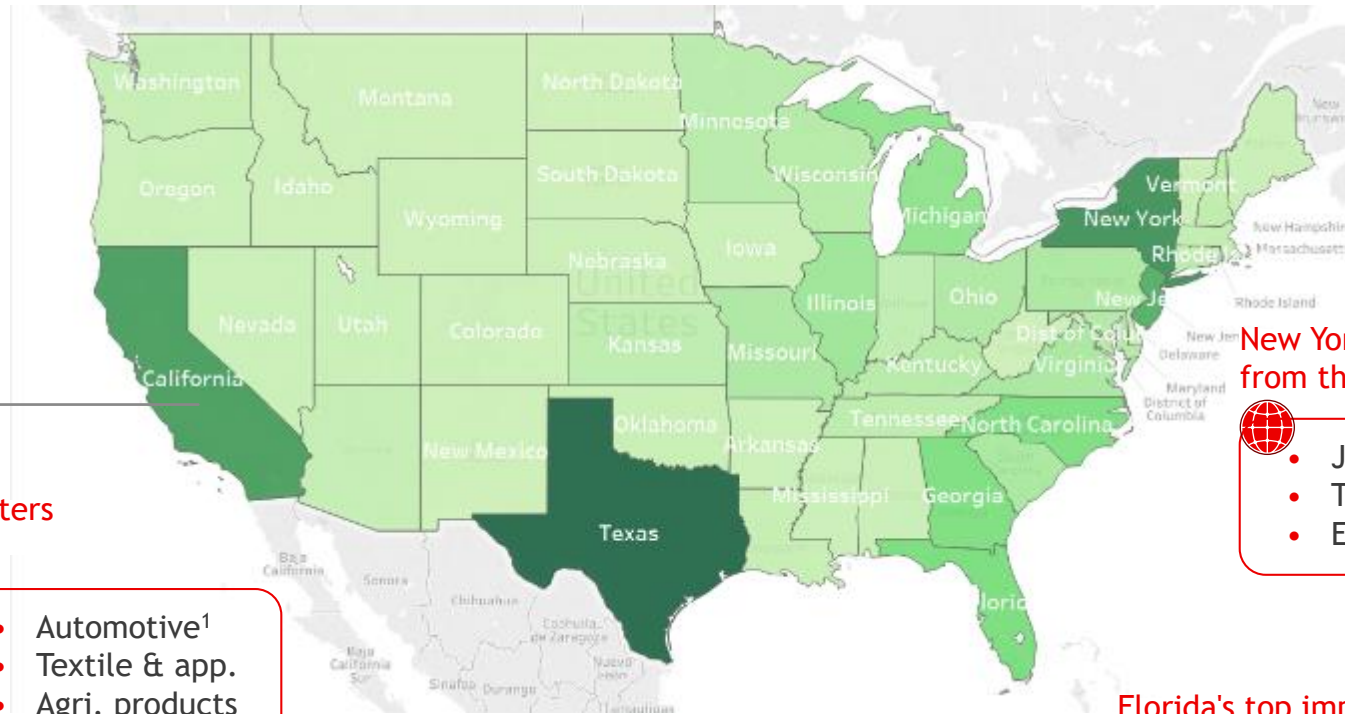
Group Average		 Turkey	 Italy	 Spain	 Poland	 Czechia	 China	 India	 Taiwan	 Vietnam
 LPI Rank		47	17	19	28	22	26	44	27	39
 Overall LPI Score	3.5	3.2	3.8	3.7	3.5	3.7	3.6	3.2	3.6	3.3
 Infrastructure	3.4	3.2	3.8	3.9	3.2	3.5	3.8	2.9	3.7	3.0
 Customs	3.2	2.7	3.6	3.5	3.3	3.3	3.3	3.0	3.5	3.0
 International shipments	3.5	3.1	3.8	3.5	3.7	3.8	3.5	3.2	3.5	3.2
 Logistics Competence	3.5	3.1	3.8	3.7	3.6	3.7	3.6	3.1	3.6	3.4
 Tracking and Tracing	3.6	3.2	3.8	3.9	3.5	3.7	3.7	3.3	3.7	3.5
 Timeliness	3.8	3.6	4.0	4.1	4.0	4.1	3.8	3.5	3.7	3.7

Comparative scoring of countries (5: Highest)



# Geographical analysis at the state level is essential for the US market

US' imports from Turkey by state (\$M)



Preliminary analysis

California's top import clusters from the world and Turkey



- Electrical eq.
- Automotive<sup>1</sup>
- Machinery



- Automotive<sup>1</sup>
- Textile & app.
- Agri. products

New York's top import clusters from the world and Turkey



- Jewelry
- Textile & app.
- Electrical eq.



- Textile & app.
- Jewelry
- Petrochemicals

Texas' top import clusters from the world and Turkey



- Electrical eq.
- Energy
- Automotive<sup>1</sup>



- Iron & steel
- Energy
- Automotive<sup>1</sup>

Florida's top import clusters from the world and Turkey



- Electrical eq.
- Agri. products
- Automotive<sup>1</sup>

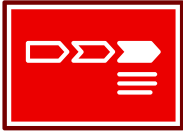


- Iron & steel
- Building mat.
- Textile & app.

1. Including parts  
Source: US Census Bureau; BCG analysis



## 3 key initiatives identified to improve Turkey's international logistics capabilities across six main areas



Develop action plan to improve logistics operations



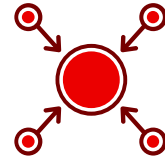
### Infrastructure

Raise quality of trade and transport related infrastructure



### Customs

Improve efficiency of the clearance process



Facilitate shared logistics services among producers



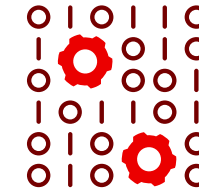
### International Shipments

Increase availability of competitively priced shipments



### Logistics Competence

Improve competence and quality of logistics services



Leverage technology across the value chain



### Tracking and Tracing

Increase transparency to track and trace consignments



### Timeliness

Improve timeliness of shipments in reaching destination within the scheduled delivery time



# Success stories indicate potential areas of development for Turkey



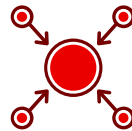
## Develop action plan to improve logistics operations

India has launched an **integrated logistics action plan** driving logistics development and logistics efficiency in the country:

- **Plan focused across the complete value chain** of logistics including transportation, warehousing etc.
- Plan aims to **bring down logistic costs to 10% of GDP**, from current level of **14%**



India



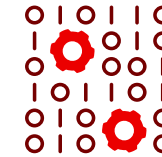
## Facilitate shared logistics services among producers

Italian ceramic tile cluster in Sassuolo has been using shared logistic services among SME producers enabling:

- **Reduction in minimum order size** due to decrease in feasible order size via shared logistics
- **Reduction in average lead time** per product due to higher frequency of shipments



Italy



## Leverage technology across the value chain

Dubai Single Trade Window is a fully integrated platform including

- **Integrated document processing** replacing physical doc. submission
- **Electronic Payment Gateway** provides multiple payment options
- **Electronic booking** to manage transportation and warehouse bookings
- **Real-time tracking** allows real time tracking of vessels








# Shared logistic services in Sassuolo cluster enables SME tile producers to fulfil LCL<sup>1</sup> orders and decrease lead time

Sassuolo is hub for ceramic tiles, shipping products >150 countries

Shared logistic services enable SMEs to cooperate to create scale with specialized offerings

-  ~80% 80% of the Italian production of tiles with more than 80 companies
-  23mn tons 23 mn tons of ceramic materials passing through each year
-  4850 truck A daily go of 4850 trucks, loaded with twenty tons of goods each



Specialized logistic services manage



collection of tiles from production plants



collective storage and preparation of shipments



optimization of mode of transport and distribution



optimization of delivery times



Decrease in min. order size



Decrease in average lead time

1. Less than container load  
Source: BCG analysis, expert interviews

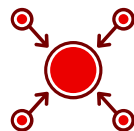


# Key recommendations for logistics optimization



## Develop action plan to improve logistics operations

- Launch a comprehensive review across the value chain to understand bottlenecks & problems and to propose solutions
- Rationalize & revise key acts, guidelines, and policies based on outcomes of the study
- Set up a robust governance structure that will own and drive the process for each sub sector



## Facilitate shared logistics services among producers

- Facilitate the launch of sector specific specialized logistics services via collaboration between producers
- Promote sharing of logistics resources among producers via central sourcing and shared transportation structures
- Cooperate with global logistics companies to set up scheduled routes with dedicated capacities for key sectors

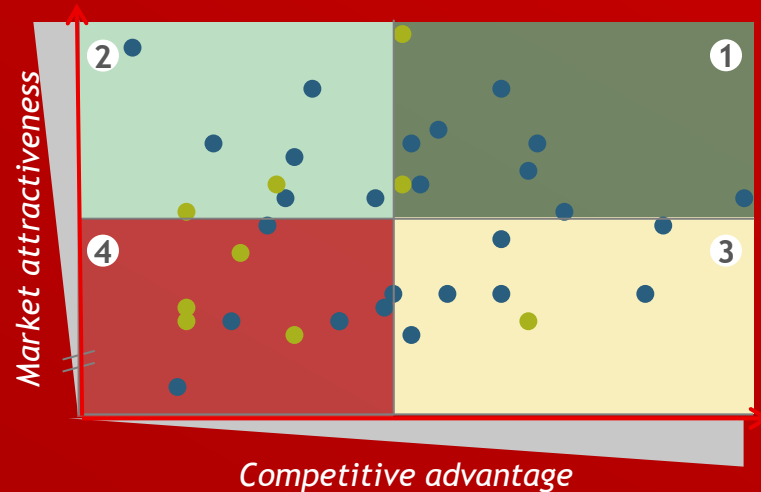


## Leverage technology across the value chain

- Drive the digitalization of logistics services through incentives and regulations to create transparency and predictability across the value chain
- Leverage data and digital technology to identify required actions to optimize trade routes for key sub-sectors



We detailed  
selected sectors  
and transversal  
levers to assess  
potential upside



## Sectors



Automotive  
(incl. parts)



Textile &  
apparel



Jewelry



Civil  
aerospace



White  
goods



Building  
materials



Furniture



Travel &  
tourism

## Transversal levers



Business  
facilitation



Country  
PR



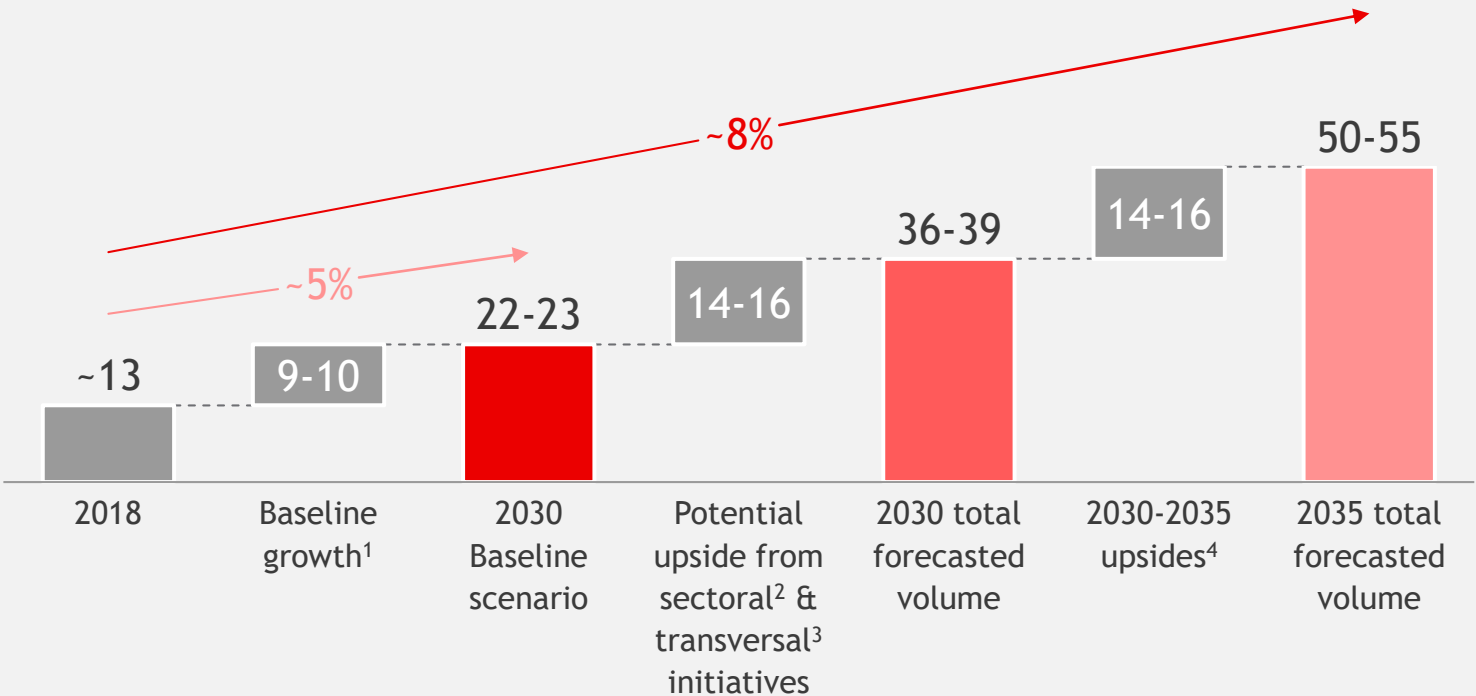
FDI and Joint  
Ventures



Logistics

# Turkey's exports to the US have substantial potential by leveraging both sectoral and transversal initiatives

Turkey's goods and services export volume to the US (\$B)



## High level forecast

	2023	2030	2035
Baseline scenario (\$B)	15-16	22-23	27-29
Total forecasted volume (\$B)	18-19	36-39	50-55

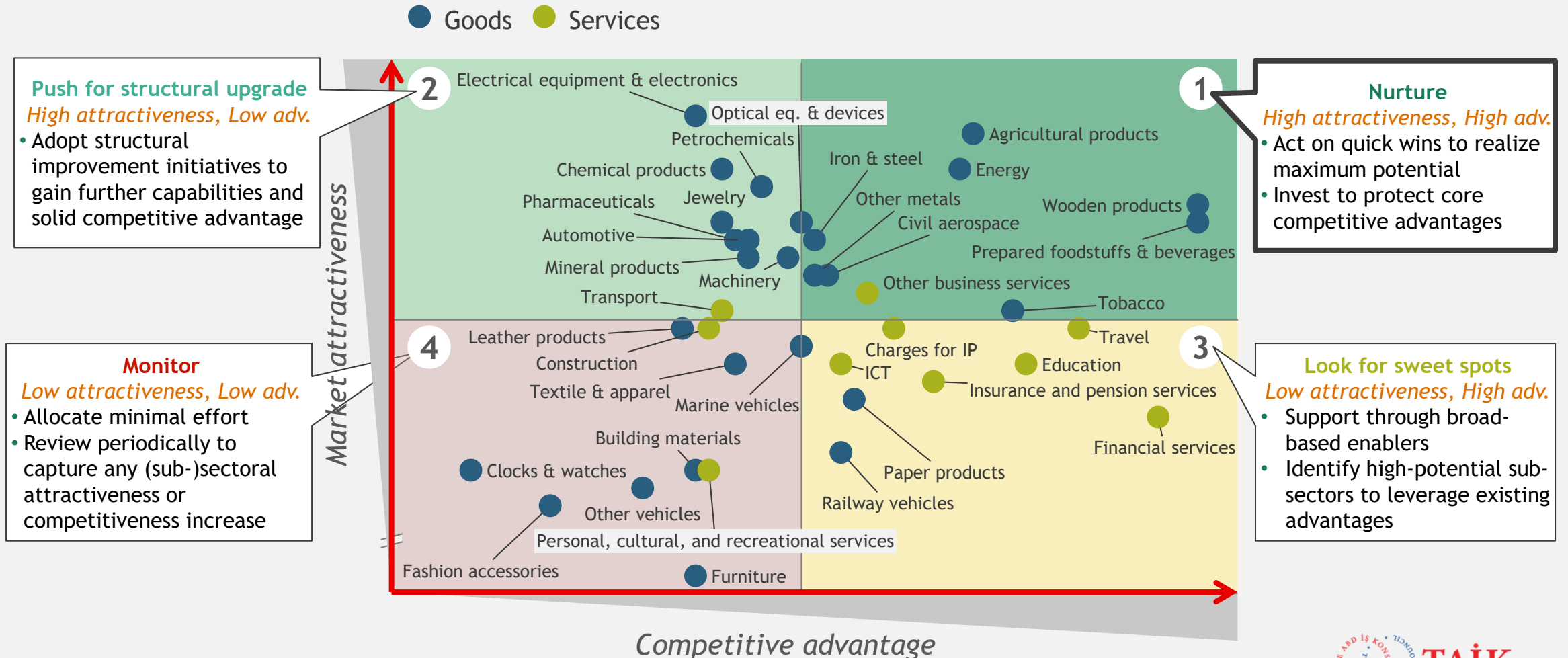
Additional impact on Turkish export competitiveness will increase Turkey's exports to other countries

1. 5% annual growth is assumed for non-prioritized sectors for 2018-2030 period 2. Based on share of wallet growth targets for each focus sector 3. Based on 15% increase in projected 2030 SoW; 2030 SoW is projected based on 4% US imports growth and 5% Turkey's exports growth to US 4. Average of 2018-2030 baseline and upside impact growth assumed for 2030-2035 period

Source: International Trade Centre; expert interviews; BCG analysis



# US perspective: Industry assessment reveals 4 groups of industries with different needs and priorities



# 4 industries with potential to uplift US exports

## Main criteria for industry selection

- **Size and potential impact**
  - E.g. civil aerospace and energy
- **Growth potential**
  - E.g. medical technology driven by city hospitals and rising demand for healthcare services
- **US competitive advantage**
  - E.g. chemical products as one of the few industries US has trade surplus
- **Value add to Turkey's economy**
  - Industries where Turkey has a low competitive adv. and US exports will have the most value add (e.g. aerospace, chemical etc.)

## Recommended focus industries



Civil aerospace



Energy



Medical equipment & devices



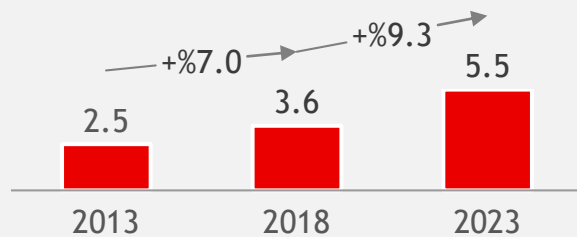
Chemical products



# Civil aerospace: Substantial opportunity through offset agreements

## Market overview

TR civil aero. imports from world (\$B)



## Top importing companies



## Key recommendations

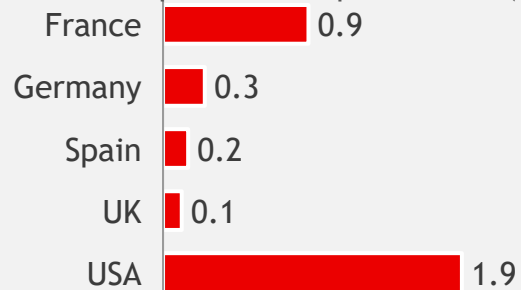


- US aerospace companies consider seeking for a **direct offset agreement**
- Aircraft exports
  - JV export parts (e.g cabin interior and aviation seats)

## Product prioritization

Engines & engines parts and aircraft are priority markets for the US in Turkey

Prioritized products' exports to TR (\$B)



## Opportunities & risks



### Expansion of Turkish civil aircraft fleet

- Turkish civil aircraft fleet expected to grow at ~8% CAGR<sup>1</sup> and reach 750+ aircraft by 2023



### Industrial collaboration opportunity between the US and Turkey

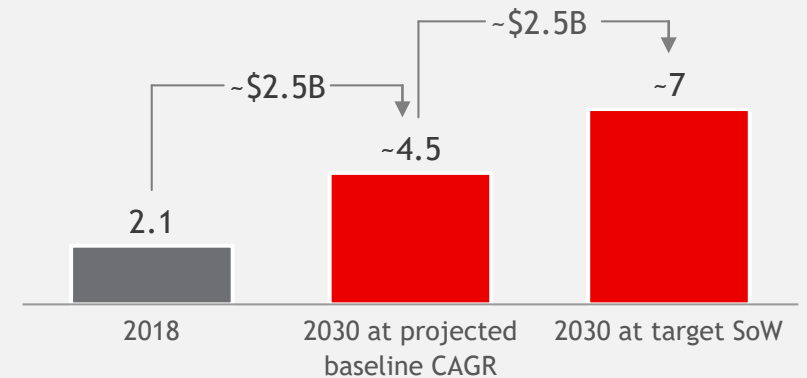
- The US is an exporter of aircraft & aircraft engines
- Turkey is an exporter of aircraft parts & aircraft engine parts



**Exposure to bilateral political rel.**  
Highly exposed to political and diplomatic relations between two countries

## Upside potential

Total upside potential of **\$5B<sup>2</sup>** in civil aerospace



1. Compounded annual growth rate 2. The US' 2030 baseline is projected at 75% of 2018-2023 CAGR<sup>1</sup>; targeted 2030 share of wallet of the US is 150% of its current share of wallet in Turkish exports of aircrafts & engines & parts

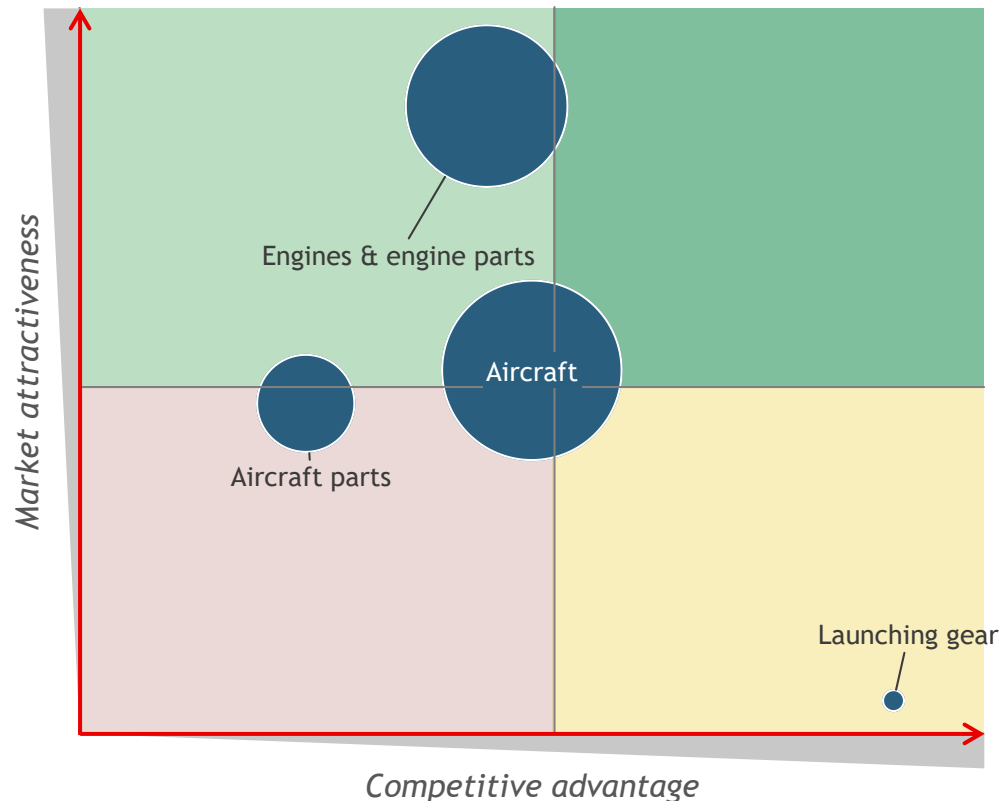
Source: International Trade Centre; EPDK; TTK; Oxford Energy; expert interviews; BCG analysis



# Aircraft, aircraft engines and parts prioritized for the US where Turkish import market promises significant growth

## Product prioritization

Engines & engines parts and aircraft are priority markets for the US



1. Compounded annual growth rate

Source: International Trade Centre; Turkish Airlines; Euromonitor; expert interviews; BCG analysis

## Product mix analysis

Exports to Turkey (\$M)

Sub-products not exhaustive

	France	Germany	UK	Spain	USA
<b>Engines &amp; engine parts</b>	<b>257</b>	<b>123</b>	<b>118</b>	<b>13</b>	<b>896</b>
☆ Turbojet & turbopropeller parts	26	46	23	10	459
☆ Turbojets of a thrust >25 kN	207	50	94	4	328
<b>Aircraft</b>	<b>659</b>	<b>140</b>	-	<b>145</b>	<b>985</b>
☆ Aeroplanes >15 tons	659	140	-	145	946

## Facts & opportunities



Airline companies are focusing on fuel efficiency due to rising oil prices; replacement is expected to be a key reason of purchase as well as fleet expansion



Turkish civil aerospace industry is forecasted to grow at ~10% CAGR<sup>1</sup> until 2023, in terms of the number of air passengers

## Exporting companies

Engines & engine parts



Aircraft







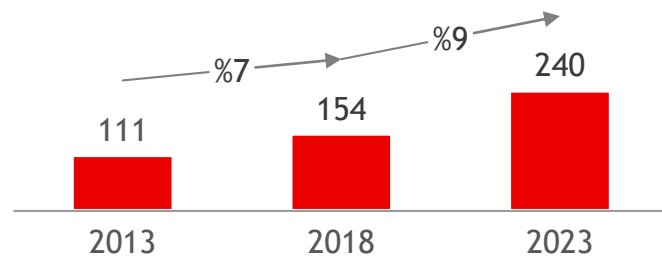
# Offset agreements between American OEMs and Turkish parts suppliers can be leveraged to further penetrate rapidly growing Turkish civil aerospace market

## Rapid growth expected in Turkish civil aerospace industry

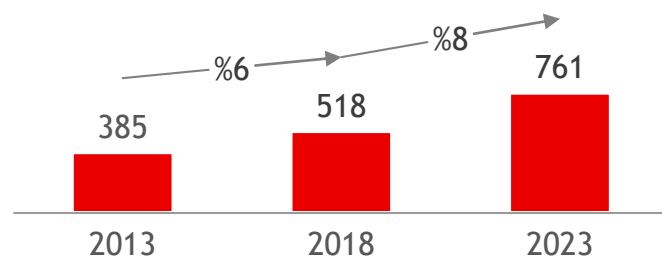
Rapid growth mainly driven by two factors

- Passenger demand growth
- Expected uplift in air traffic through Istanbul Airport

### Turkish aviation passenger growth (mil.)



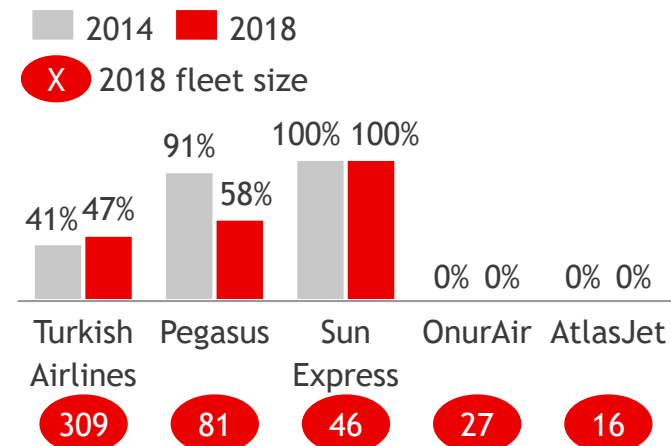
### Turkish civil aircraft fleet growth (#)



## US OEM's current share in Turkish fleet has room to improve

US OEM's share in Turkish commercial fleet stagnant around 50% since 2014

### US OEM's share in major airlines' fleet (%)



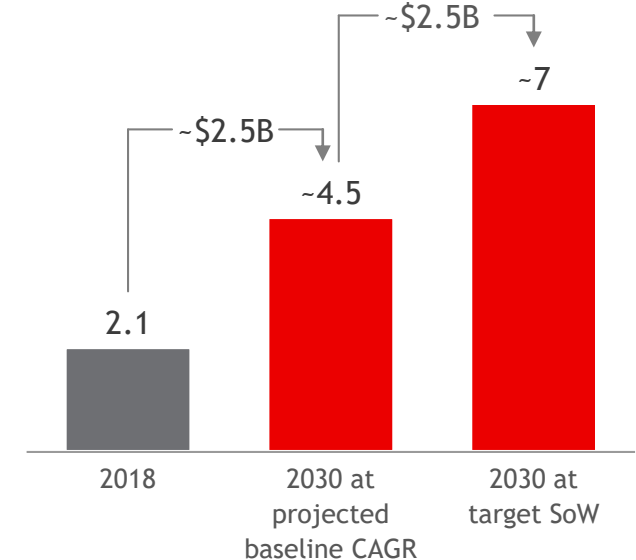
- THY is planning to increase fleet size to ~500 by 2023, significant opportunity for US OEM
- Pegasus preferring A320 over B737; US OEM needs to respond

## Reciprocal upside potential through an offset agreement

US OEMs consider signing a **direct offset agreement with** Turkish airlines companies

- US exports aircraft
- JVs export parts such as cabin interior and aviation seats

Total upside potential of **\$5B<sup>1</sup>** in civil aero.



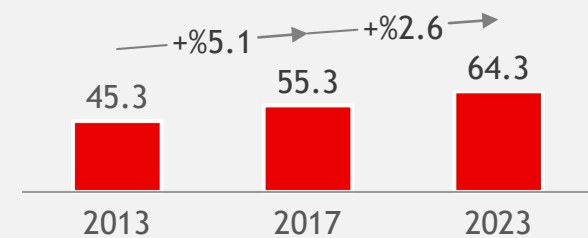
1. The US' 2030 baseline is projected at 75% of 2018-2023 CAGR; targeted 2030 share of wallet of the US is 150% of its current share of wallet  
Source: International Trade Centre; Turkish Directorate General of Civil Aviation; Turkish Airlines; Euromonitor; expert interviews; BCG analysis



# Energy: Considerable market potential and right to win for the US in liquefied natural gas (LNG)

## Market overview

TR natural gas imports from world (\$B)



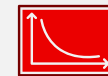
## Top importing companies



## Key recommendations



Assess opportunity to sign long-term LNG contracts with Turkey to secure export volume

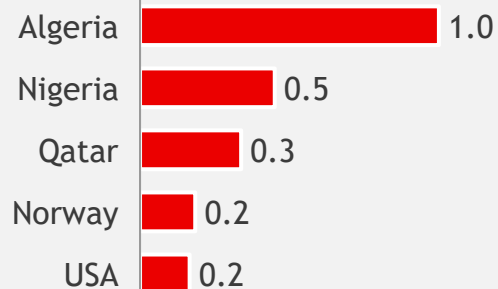


Exploit opportunities of hub pricing compared to oil-indexed pricing

## Product prioritization

Liquefied natural gas prioritized due to very high market attractiveness in Turkey and the US' competitive edge

LNG exports to Turkey, 2017 (\$B)



## Opportunities & risks



Increasing capacity in Turkey via add. capacity investments in LNG terminals



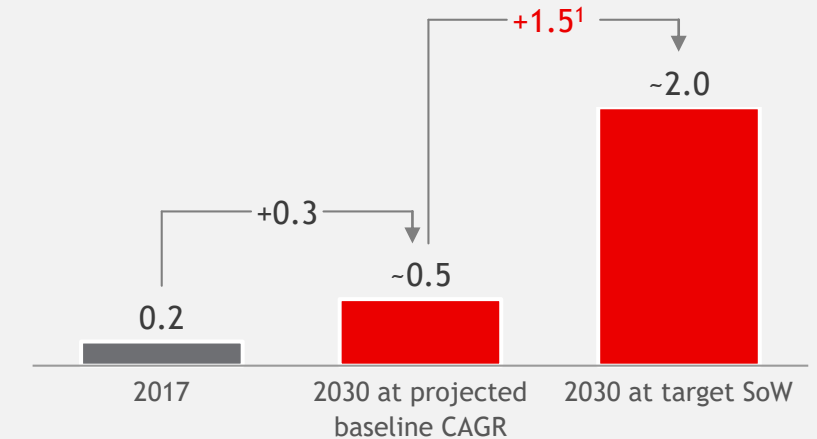
Opportunity to shift from spot trading to contract trading of LNG



Fluctuation of oil prices may lead to loss of cost-competitiveness (e.g. oil-indexed pipeline natural gas prices to fall)

## Upside potential

The US can capture \$2 B<sup>1</sup> in LNG



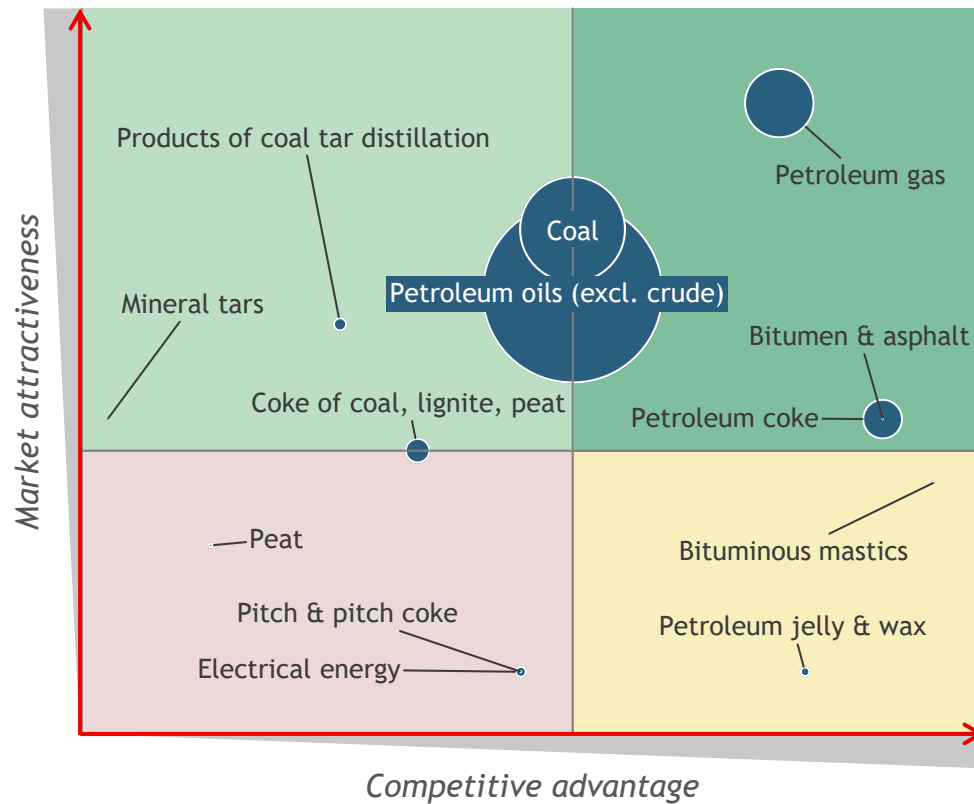
1. Turkey's 2030 baseline is projected at 50% of 2013-2017 CAGR; targeted 2030 share of wallet for the US is the half of contracted LNG trade vol. of Turkey  
Source: International Trade Centre; EPDK; TTK; Oxford Energy; expert interviews; BCG analysis



# LNG should be the focus of US due to its competitive advantage and promising Turkish import market

## Product prioritization

Petroleum gas and coal very attractive markets, the US is highly competitive especially in petroleum gas



## Product mix analysis

### Sub-products not exhaustive

Exports to Turkey, 2017  
(\$M)<sup>1</sup>



### Petroleum gas

☆ Natural gas, liquefied	1,019	459	345	188	-	-	-	169
Natural gas, gaseous	-	-	-	-	6,329	2,041	1,444	-

Exports to Turkey, 2016  
(\$M)<sup>2</sup>



### Coal

Bituminous coal	1,051	872	292	172	155	144
-----------------	-------	-----	-----	-----	-----	-----

## Sector facts & trends



Share of natural gas in Turkey's primary energy sources for electricity production down from 48% in 2014 to 33% in 2016, however share of LNG within total imports of natural gas increased from %14.8 to 16.5%



Residential natural gas consumption expected to grow by 1-2 Bm<sup>3</sup> per year (~15% growth from 2015 to 2016) mainly due to population growth, new constructions, gasification of south-eastern Turkey and low seasonal temperatures

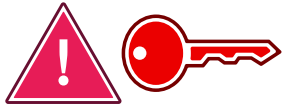


The U.S. coal industry is declining due to lower-cost natural gas, renewable energy, regulations regarding GHG<sup>3</sup> emissions and public health

1. Converted from volume (Sm<sup>3</sup>) to value by taking into account \$1 above 2017 avg. NBP prices 2. Converted from volume (Kt) to value by taking into account \$128/ton for coking coal and \$67/ton for thermal coal 3. Greenhouse gas  
Source: International Trade Centre; EPDK; TTK; Oxford Energy; expert interviews; BCG analysis



# US can seize the growth of LNG's share in Turkey mainly by shifting from spot trading to contract trading with Turkey



## Risks & opportunities



### Risk of losing price competitiveness

- Fluctuation of oil prices may cause oil-indexed pipeline natural gas prices to fall, eliminating LNG's price competitiveness



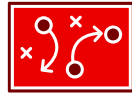
### Increasing capacity in Turkey

- Additional capacity investments in LNG terminals
- Turkey's 3<sup>rd</sup> FSRU is in production



### Opportunity to shift from spot trading to contract trading of LNG

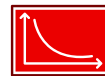
- Turkey and Nigeria's contract due to expire in Oct. 2021
- Turkey and Algeria's contract due to expire in Oct. 2024



## Key recommendations



Assess opportunity to sign long-term LNG contracts with Turkey to secure export volume following the expiry of current contracts in 2021 and 2024



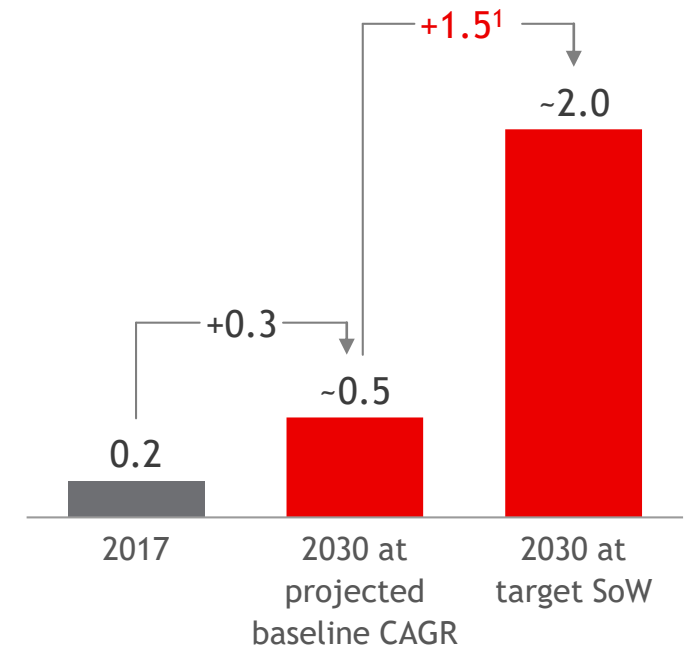
Continue with hub pricing (Henry Hub for the US) instead of oil-indexing in order to maintain current price advantage over pipeline natural gas suppliers



High-level, outside-in estimations

## Potential upsides

~\$1.8 B<sup>1</sup> upside potential by 2030 in LNG exports to Turkey through contract trading



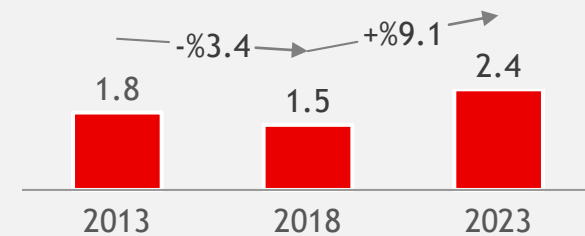
1. Turkey's 2030 baseline is projected at 50% of 2013-2017 CAGR; targeted 2030 share of wallet for the US is the half of contracted LNG trade vol. of Turkey  
Source: International Trade Centre; EPDK; TTK; Oxford Energy; expert interviews; BCG analysis



# Medical devices: The US can aim to win the opportunity in the medical device tenders for city hospitals

## Market overview

Turkey medical devices imports (\$B)



## Top importers



Private  
Hospitals

## Key recommendations

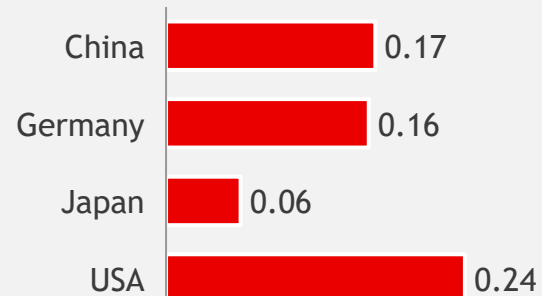


Develop alternative strategies to capture increasing demand via value for money solutions

## Product prioritization

- Medical imaging devices
- Medical instruments

Selected products' exports to Turkey (\$B)



## Risks & opportunities



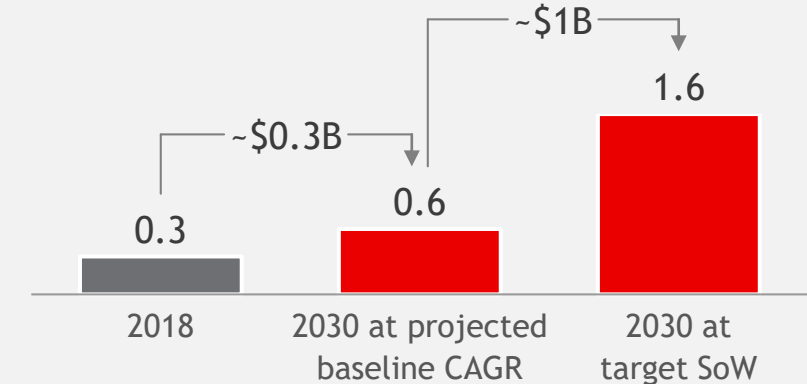
20+ city hospitals investments can be expected in the next decade with significant requirement for medical device tenders



Rising export appetite by Chinese firms in non-US markets

## Upside potential

The US can capture additional **\$1.3B** in medical devices per annum

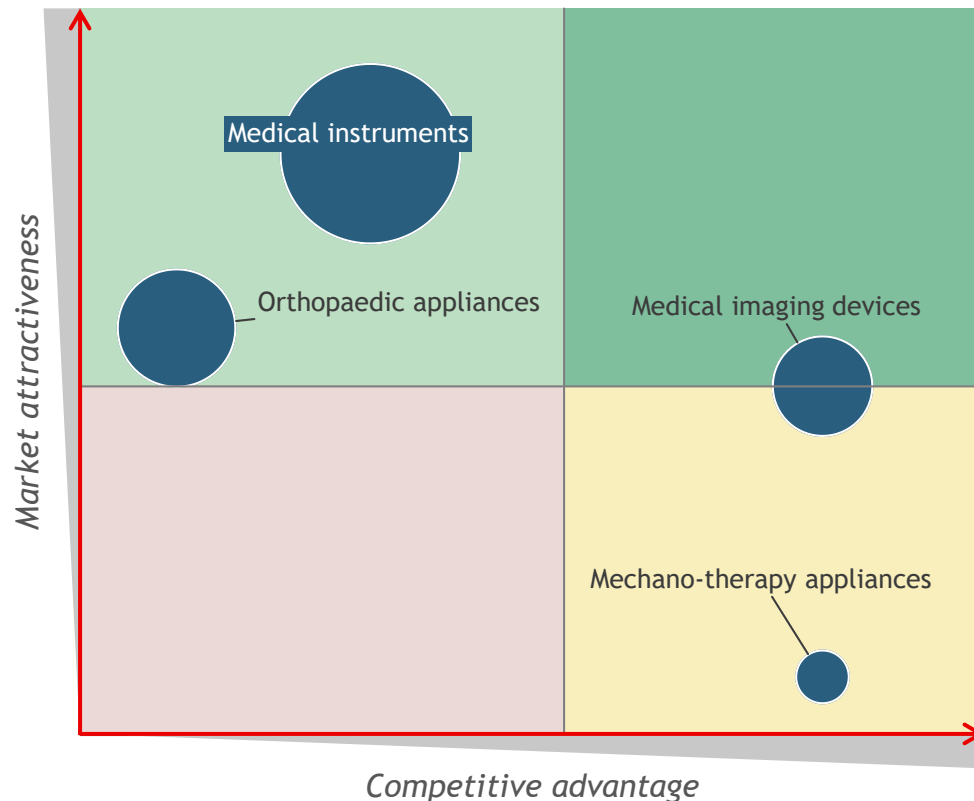




# Medical imaging devices prioritized for the US due to its high competitiveness and the unique opportunity in Turkey

## Product prioritization





Medical imaging devices prioritized due to high competitive advantage of the US, medical instruments prioritized mainly due to market attractiveness



## Product mix analysis

Exports to Turkey (\$M)

Sub-products not exhaustive

	 China	 Germany	 Japan	 USA
☆ Medical imaging devices	47	45	22	65
Radiography, fluoroscopy & mammography	11	11	11	28
Computed tomography	9	8	6	17
Medical instruments	123	119	39	177

## Facts & opportunities

- Medical instruments market currently greater in size but stagnant
- Opportunity in medical imaging devices mainly due to the medical device tender following the construction of city hospitals

## Exporting companies



HITACHI

TOSHIBA MEDICAL





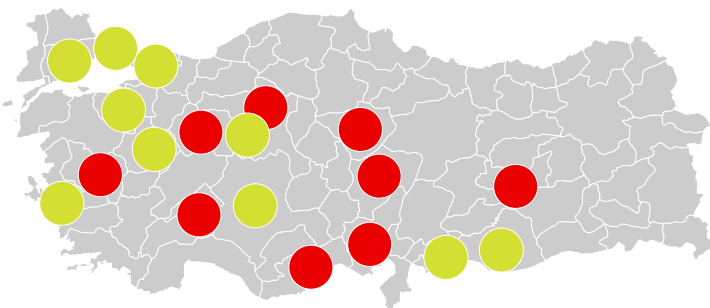
# The US can aim to win the expected medical devices tenders with competitive bids

## Construction of city hospitals driving medical device demand

- 9 hospitals completed
- 10 under construction
- Potential of additional tenders in the near future

## Signed city hospital projects in Turkey

- Completed
- Under construction



## High value of medical devices tender in progress for city hospitals

### Five types of devices demanded

- Magnetic resonance imaging
- Computed tomography
- Ultrasonography
- Digital radiography
- Patient monitors

### Tender recently postponed; terms and conditions will be updated

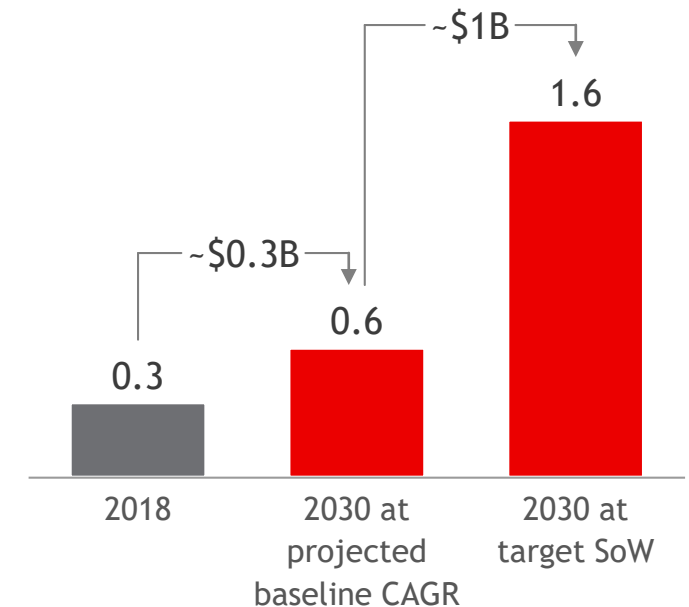
- New requirement that devices be partially produced in Turkey
- Required local production ratio expected to vary by product type



Multi-billion dollar opportunity depending on the required local production ratio

## The US needs to focus on capture the opportunity

US firms should focus developing value for money solutions; ~\$1.3B<sup>1</sup> total annual upside potential



1. Turkey's 2030 baseline is projected at International Trade Administration's 2018-2020 CAGR forecast (1.4%) of Turkish medical devices market. Targeted 2030 share of wallet is based on the assumption that General Electric wins the tender with 50% local production requirement, plus an additional \$5B of exports of after-sales and replacement.  
Source: Turkish Ministry of Health; Medikal Akademi; US International Trade Administration; BCG analysis



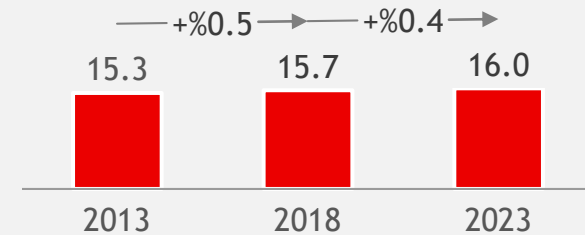


# Chemical products: Significant demand unmet by domestic players

Substantial opportunity for US firms with strong know-how and capability

## Market overview

TR chemical imports from world (\$B)



## Top exporting companies



INEOS



## Key recommendations



Assess opportunities in high priority areas (e.g. agro-chemicals)



Establish and seize market position with high brand image (e.g. reliability, aftermarket services etc.)

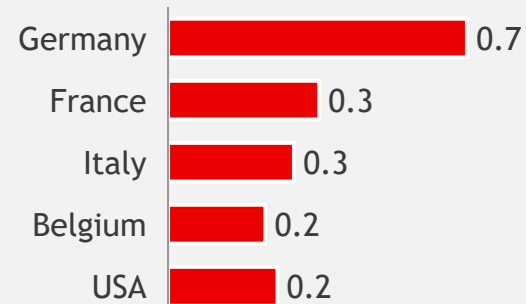


Consider R&D investment for product development, to define consumer trends and to consolidate market position

## Product prioritization

Hygiene products, binders & agrochemicals are prioritized

Exports of prioritized products to Turkey (\$B)



## Opportunities & risks



Rapid growth in demand in sel. products (e.g. hygiene products and pesticides & agrochemicals)



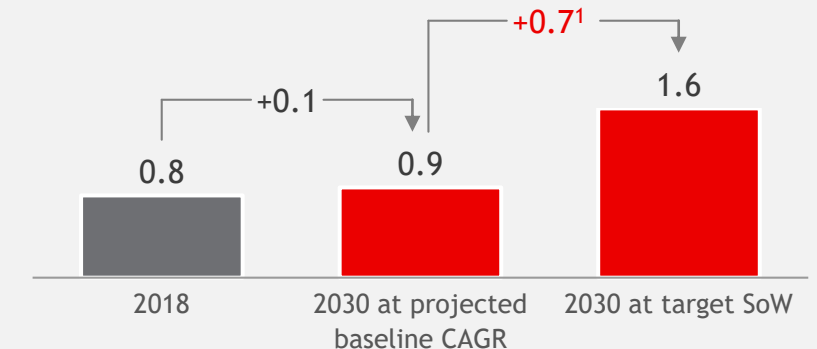
Strong competitive advantage, know-how and market position of US companies



Negative impact of tariffs on cost position

## Upside potential

The US can capture additional \$0.8B<sup>1</sup> in chemicals



1. Turkey's 2030 baseline is projected at 2 times the CAGR of 2018-2023 CAGR; targeted 2030 share of wallet for the US is 125% of its fair share in prioritized products, and the average of its current SoW and fair share for all other products

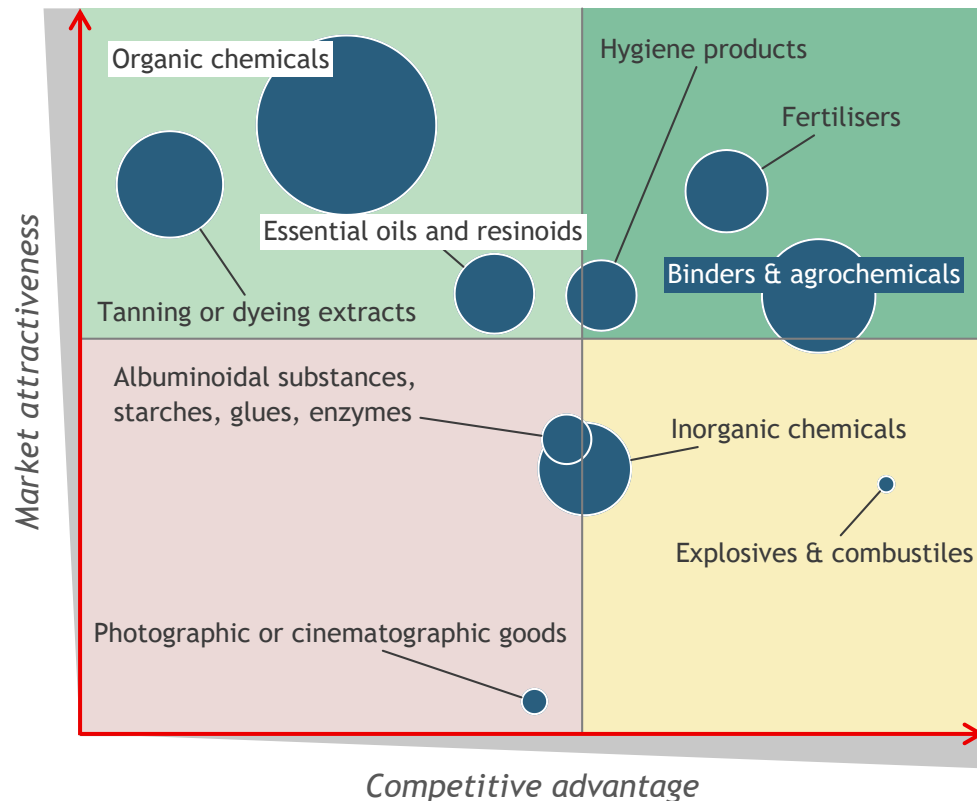
Source: International Trade Centre; EPDK; TTK; Oxford Energy; expert interviews; BCG analysis



# The US has right to win in hygiene products, binders and insecticides

## Product prioritization

Hygiene products, binders & agrochemicals are prioritized



## Product mix analysis

Exports to Turkey (\$M)

Sub-products not exhaustive

	Saudi	S. Korea	Egypt	Kuwait	USA
<b>Organic chemicals</b>	<b>455</b>	<b>421</b>	<b>138</b>	<b>97</b>	<b>374</b>
Methanol	10	-	138	-	0
Ethylene glycol	184	0	0	70	18
Terephthalic acid & salts	1	221	-	-	3
<b>Fertilisers</b>	<b>0</b>	<b>29</b>	<b>380</b>	<b>-</b>	<b>11</b>
Nitrogenous fertilisers	-	29	375	-	3
	Germany	Belgium	Italy	France	USA
<b>☆ Hygiene products</b>	<b>176</b>	<b>107</b>	<b>85</b>	<b>49</b>	<b>51</b>
Surface active agents	84	98	62	18	19
<b>☆ Binders &amp; agrochemicals</b>	<b>474</b>	<b>105</b>	<b>188</b>	<b>280</b>	<b>187</b>
Pesticides & agrochemicals	99	14	17	111	32
Foundry binders	187	26	63	34	26

## Exporting companies

**BASF**  
We create chemistry



**INEOS**





# Focusing on rapidly growing and promising products is key to capture additional share in chemical products

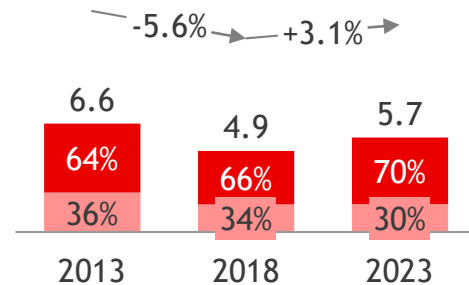


## Surface active agents

Commodity chemicals make up 29.1%<sup>1</sup> of TR chemicals market

### Sales value in Turkey (\$B)

Beauty and Personal Care  
Home Care



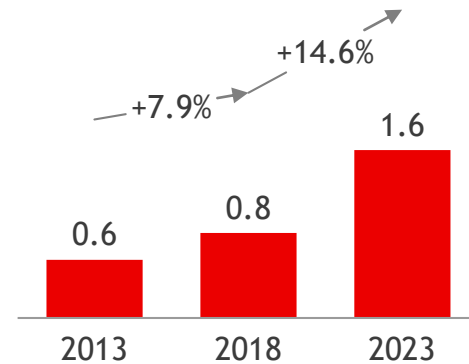
Higher growth expected in beauty & personal care products



## Pesticides & agrochemicals

Agrochemicals make up 12.4%<sup>1</sup> of TR chemicals market

### Pesticides & agrochemicals gross output, Turkey (\$B)



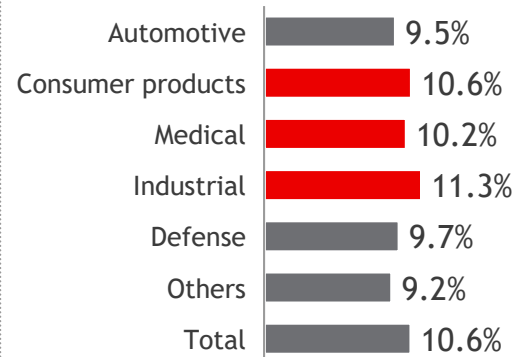
Substantial opportunity in agrochemicals, rapid growth expected



## Foundry binders

Specialty chemicals make up 37.8%<sup>1</sup> of TR chemicals market

### 2018-2023 CAGR<sup>2</sup> forecasts for metal injection molding market (MEA region)



Foundry binders for consumer products, medical & industrial metal injection market offer the highest potential

## Product focus is key in lifting chemicals exports



Assess opportunities in high priority areas (e.g. agrochemicals)

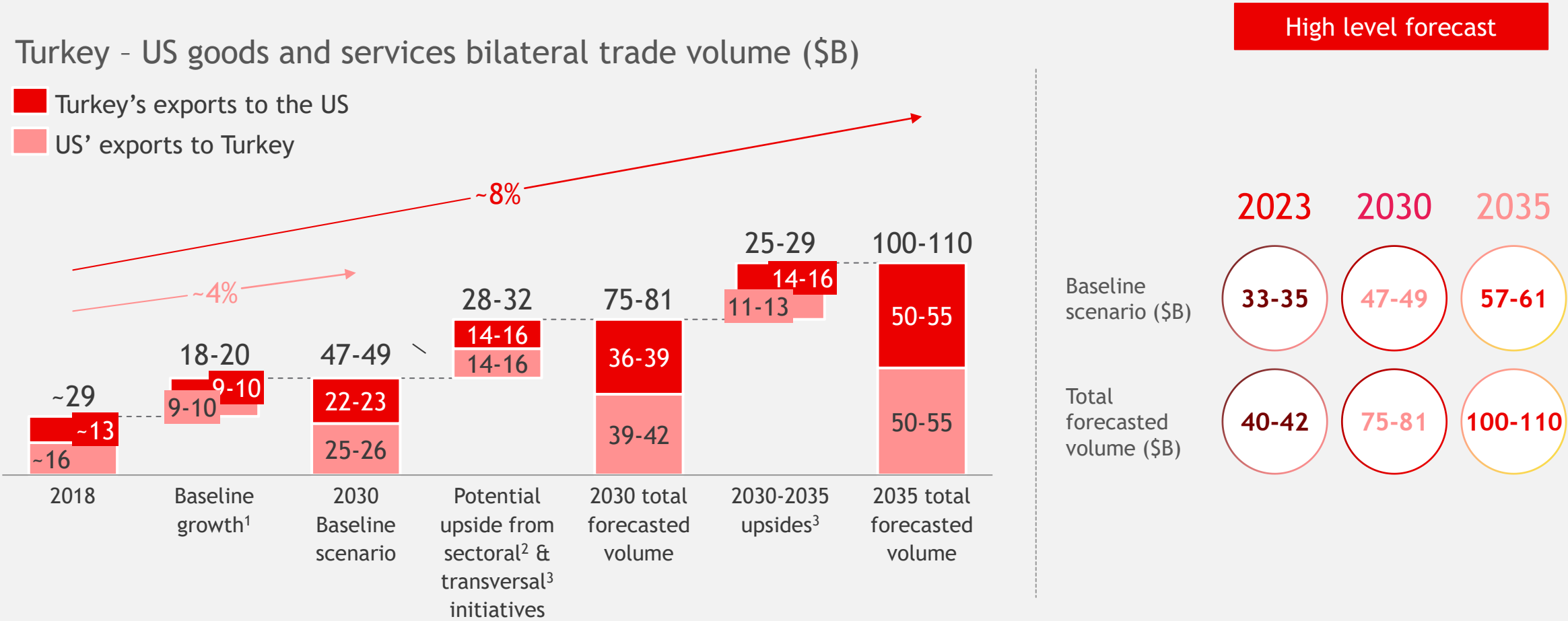


Establish and seize market position with high brand image (e.g. reliability, aftermarket services etc.)

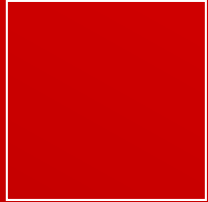


Consider R&D investment for product development, to define consumer trends and to consolidate market position

# Turkey-US bilateral trade volume has potential by leveraging both sectoral and transversal initiatives



1. 2018-2030 CAGR assumptions for non-prioritized sectors: 5% for TR, 4% for the US 2. Based on share of wallet growth targets for each focus sector  
3. Based on 15% increase in projected 2030 SoW; 2030 SoW is projected based on 4% TR imports growth (4% for US) and 4% US' exports growth to TR (5% for TR) 4. Average of 2018-2030 baseline and upside impact growth assumed for 2030-2035 period  
Source: International Trade Centre; expert interviews; BCG analysis



# Implementation plan



## High priority areas for the next 6 months



Implementation

1

Define responsibilities, milestones and key deliverables for the recommendations in the implementation plan



Business Facilitation

2

Establish a task force to improve business facilitation services (e.g. meetings with sector reps. to identify needs for trade centers)



Country PR

3

Initiate contacts and improve Turkey's image in safety & security

4

Launch a targeted campaign utilizing digital channels and brand advocates to improve country image



FDI and JV

5

Set an action group to prepare a holistic FDI & JV strategy and to promote Turkey as a hub for production and R&D investment center in key sectors (e.g. automotive)



Communication

6

Set up a committee to define and steer the communication strategy of the overall program (e.g. communication with country leaders, selected large firms and SMEs)

**Key stakeholders need to select and focus on immediate actions to build a success story**

## Detailed action plan for high priority areas (I/III)



Implementation

### ① Define responsibilities, milestones and key deliverables for the initiatives in the implementation plan

- Select relevant stakeholders (e.g. business associations and gov. entities) to sponsor, lead and contribute to -should be defined for each initiative
- Define roles and responsibilities for each task of the initiative
- Set key milestones and deliverables
- Define KPIs for measuring initiative success
- Identify associated risks and develop potential solutions
- Set a program management office (PMO) to track and manage overall progress of the implementation plan



Business  
Facilitation

### ② Establish a task force to improve business facilitation services

- Communicate with key sector representatives and identify necessities (e.g. functions and geographies)
- (Depending on identified needs) extend trade centers functionally and geographically
- (Depending on identified needs) improve capability and capacity of Turkish commercial service in the US
- Stimulate cooperation between US and Turkish Eximbanks to collaborate and to steer common projects

## Detailed action plan for high priority areas (II/III)

### ③ Initiate contacts and improve Turkey's image in safety & security perceptions

- Identify and contact key US government agencies to remove / soften travel warning (e.g. US Department of State -Bureau of Consular Affairs, Executive Office of the President)
- Identify and contact international rating agencies to better reflect Turkey's improvement in safety & security in recent years
- Provide documentation and detailed information to confirm Turkey's improvement in safety & security



Country PR

### ④ Launch a targeted campaign utilizing digital channels and brand advocates to improve country image

- Set a marketing strategy to promote Turkey in the US, with the involvement of key stakeholders
- Select and work with professional marketing and PR firm which has capability to promote Turkey and to influence US citizens
- Enable utilization of alternative channels (e.g. Youtube, Netflix) and brand advocates (e.g. social media influencers)
- Help design use of multiple channels and synchronization in marketing (e.g. NY Times articles, Netflix series, National Geographic documentary, CNN documentary etc.)



Country PR



## Detailed action plan for high priority areas (III/III)

### 5 Set an action group to prepare a holistic FDI & JV strategy



FDI and JV

- Select key countries and sectors to attract FDI and to promote JVs in Turkey
- Identify existing US firms and try to identify how existing investments could be increased
- Promote Istanbul/Turkey as a regional hub for companies with a global footprint
- Try to address question marks in investors' minds, convey clear messages about Turkey's investment environment
- Organize a large Turkey Investment Conference, select key spokesperson and invitees to maximize impact

### 6 Set up a committee to define and steer the communication strategy of the overall program



Communication

- Set a strategy to communicate with country leaders and execute strategy with utmost attention
- Select key firms in Turkey to present program and the initiatives they can involve, contribute or get benefitted
- Select targeted SMEs to take input, to inform and to involve in initiatives (e.g. identify needs for business facilitation, promote auto parts export to US etc.)

# Authors of the report can be reached for further questions and comments



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