

22 July 2020

04 European manufacturers hit hard by a unique trade, manufacturing and retail standstill

08 An acceleration of the European sustainability agenda could speed up the recovery





EXECUTIVE SUMMARY

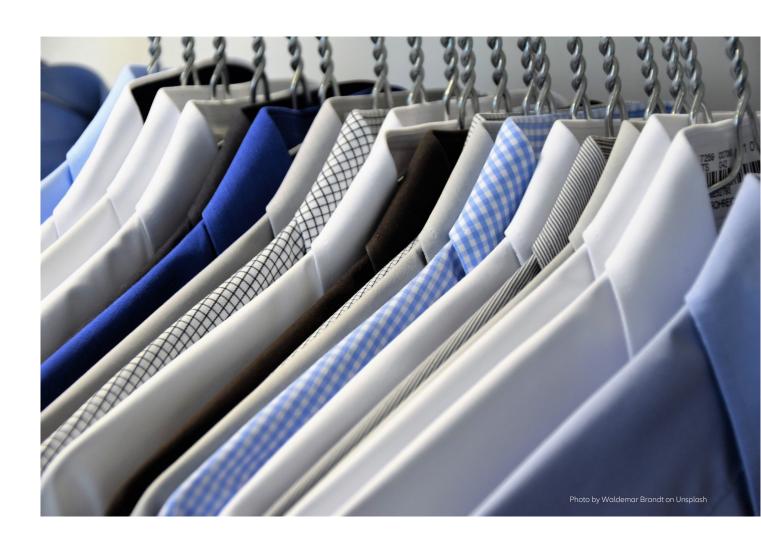


Aurélien DUTHOIT, Sector Advisor for Retail, Technology and Household equipment

+33.1.84.11.45. 04

aurelien.duthoit@eulerhermes.com

- An unprecedented disruption in trade, manufacturing and retail activities, followed by a major economic crisis, will send the turnover of the European textile and apparel industry down by -19% in 2020, amid a -9% slump in GDP for Eurozone countries. We expect turnover to bounce back by about +15% in 2021 and return to pre-crisis levels only in 2023, assuming a progressive easing of the global sanitary emergency and substantial fiscal and monetary support to the economy.
- Despite the major relief provided by the various job-retention schemes and abundant funding, we believe that up to 8% of total industry employment (about 158,000 jobs) and 6% of companies (about 13,000) could disappear by the end of 2021. The share of SMEs in the textile industry's total turnover is twice as high as the manufacturing sector average, making it more vulnerable.
- However, three factors suggest the industry is far more resilient and competitive than it was in 2009, making it better placed for a recovery: 1) The stabilization of the European textile and apparel trade balance, 2) dynamic growth across segments where European manufacturers are the most competitive and 3) progress in productivity. Public support to the industry could not only allow a speedier rebound and help manufacturers return to their pre-crisis growth track, but also align with calls for a greener and more digital economy.
- A greener textile industry would place greater emphasis on quality rather than quantity, a U-turn from the fast-fashion paradigm that has worked against the best interests of Europe's manufacturing industry. Booming per capita apparel consumption comes with a cost: the industry globally generates about 10% of all greenhouse gas emissions. The case of Italy, where the aligned interests of consumers, retailers and manufacturers have allowed the country to keep a preference for more expensive, yet higher quality and locally made apparel, sets the example for the rest of the region. The benefits of import substitution would be very tangible: A 10% decrease in French and German imports of apparel would represent the equivalent of an 8% boost in European apparel manufacturing turnover. Efforts to encourage a transition from linear to circular manufacturing practices could also yield substantial opportunities for the local manufacturing base.
- Encouraging the adoption of state-of-the-art technologies would also be beneficial to an industry where SMEs dominate and do not necessarily have the clout to engage in expensive R&D programs. Learning from the lessons of the past retail lockdown and the slow recovery in international travel, support for the development of ecommerce capabilities would help manufacturers increase their reach and mitigate their risks.



-19%

Expected slump in turnover for Europe's textile and apparel industry in 2020

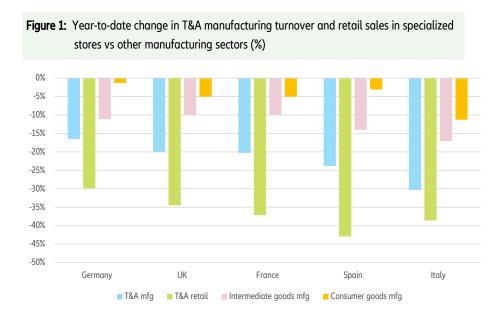
EUROPEAN MANUFACTURERS HIT HARD BY A UNIQUE TRADE, MANUFACTURING AND **RETAIL STANDSTILL**

The EUR205bn European textile and • apparel (T&A) manufacturing industry has not escaped the wider economic slump that has shaken the world since the beginning of the Covid-19 outbreak. The pandemic has so far had a threefold impact on the industry:

- The impact was first felt in trade activities as China entered a prolonged and severe lockdown period starting in February — the country is a major exporter of fibers and fabric used by European manufacturers and a major destination for European apparel exporters.
- European production was, in turn, hit by regional lockdown measures, which began in the major manufacturing districts of Brescia and Bergamo (Lombardy). Manufacturing hit a low in April, with year-on-year Looking at year-to-date data on manu-(Germany) and -78% (Italy).

cialized retail also occurred in April, with year-on-year declines oscillating between -65% for the UK and -90% for Spain.

slumps ranging between -35% facturing and retail activity (Figure 1), we find strong evidence of both T&A The region also witnessed a col- manufacturing and retail falling much lapse in demand, with its three client harder than other manufacturing activiindustries (export markets, local in- ties. Because industrial textiles are industries, local apparel retailers) run- termediate goods and consumer textile ning at low capacity to avoid an goods come under discretionary expeninventory build and preserve their diture, the T&A industry tends to be hit cash positions. The low point in spe-harder during economic downturns.



Sources: Eurostat, Euler Hermes, Allianz Research



T&A business sentiment as bad as in 2009, order books not recovering yet

that of 2009 (Figure 2). While the trough their French and Italian peers. in activity is already past for manufacturers, June 2020 data show European com- Comparing the business sentiment of the panies are still failing to see a significant T&A industry versus the rest of the manurecovery in their order books. As for in- facturing sector, we again find evidence ventory levels, business sentiment deteri- of T&A being far more pessimistic than orated to a lesser extent and has shown the wider manufacturing industry as resigns of a modest improvement. German gards its order books and inventories —

Business sentiment surveys conducted by manufacturers were generally more pes-much like in 2009, the sector's recovery the European Commission point to a simistic across all segments and for both looks set to lag behind that of the rest of deterioration similar in magnitude to order book and inventory levels than the economy (Figure 3).

Figure 2: Business confidence survey - European Union (balance)

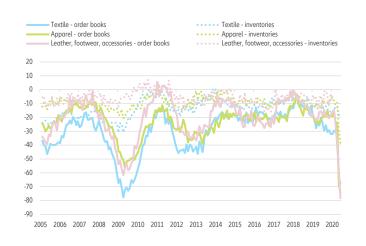
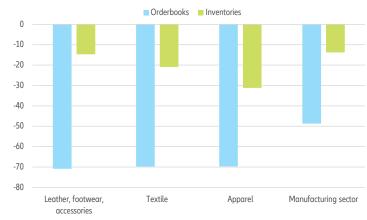


Figure 3: Business confidence survey - European Union, June data (balance)



Sources: DG ECFIN, Euler Hermes, Allianz Research

Sources: DG ECFIN, Euler Hermes, Allianz Research

Industry turnover will contract by -19% for 2020...

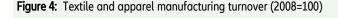
Combining year-to-date data on industry turnover with manufacturing PMIs, business sentiment surveys and our economic scenario for 20201, we anticipate the European textile and apparel industry will shrink by -19% in 2020 (Figure 4)

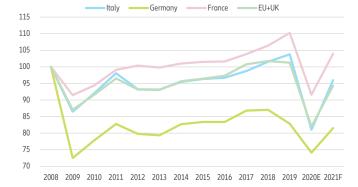
- Italy, the region's largest manufacturer (Figure 5), will see the steeper decline in 2020 (-22%) because of a terrible first quarter and a comparatively higher exposure to the apparel retail market (Figure 6). Because fashion is a seasonal business, sales • lost during the lockdown will be hardly compensated for throughout the year and the clearing of inventories will weigh on realized prices. Also, rising unemployment across Europe will weigh on consumer confidence and clothing purchases, which are typical discretionary spending items.
- Germany will fare better for the exact opposite reasons, that is a less dramatic start to 2020 and a lower

- green agenda would threaten the facturers. cost-competitiveness of German manufacturers.
- scenario).

exposure to the fashion retail mar- Beyond a major hit on turnover, we also ket. German manufacturers should anticipate a significant deterioration of see turnover fall by -11% in 2020, payment terms from struggling retail The industry's trade association tex- customers. The International Textile Matil+mode has been critical of the nufacturer Federation (ITMF) has called German stimulus package on the for understanding and cooperation betgrounds that the proposed VAT tax ween manufacturers and retailers after cut was not enough to compensate large retail chains invoked force mafor lost lockdown weeks, and that jeure clauses to freeze rent payments the proposed acceleration of the and cancel or delay orders from manu-

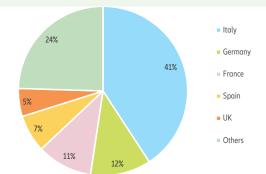
Between 2008 and 2019, the textile and France will be in an intermediate apparel sector shed an estimated situation, with a -17% hit in 2020. 600,000 jobs and 22,000 companies Much like Italy, it is comparatively through industry consolation, and we more exposed to the apparel retail expect this trend to accelerate. Looking market, but unlike Italy it has a nar- at past recessions and factoring in the row manufacturing base. Accoun- unique characteristics of the ongoing ting for about a quarter of global crisis, we estimate that total sector emluxury goods sales, it will suffer from ployment could decline by as much as the collapse of the segment ex- 8% (about 158,000 jobs) and company pected in 2020 (-22% to -25% accor- count by -6% (about 13,000 companies), ding to Bain & Company's median vs-13% and -7% in 2009, respectively.





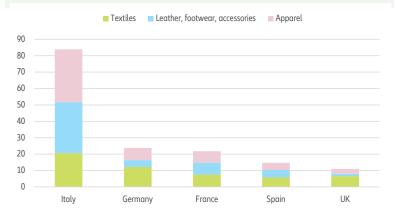
Sources: Eurostat, Euler Hermes, Allianz Research estimates

Figure 5: EU27+UK textile & apparel industry turnover breakdown by country, 2019 estimates (%)



Sources: Eurostat, Euler Hermes, Allianz Research estimates

Figure 6: Estimated industry turnover by segment (2019, EUR bn)



Sources: Eurostat. Euler Hermes. Allianz Research estimates

A more resilient industry better placed for a swifter recovery

Despite a bigger hit on revenue, we expect the textile and apparel industry to be more resilient than in 2009 and better placed for a recovery. A mix of macroeconomic and industry-specific factors should allow the industry to bounce back by +15% in 2021:

- Unlike 2009, there has so far been no deterioration in funding conditions for companies – in fact, central banks and governments have rushed to provide ailing companies • with ample liquidity. Job-retention schemes have also provided a substantial relief for this labor-intensive industry: IVGT, one of Germany's trade associations, estimated that more than 80% of textile companies still had staff under partial-work schemes in June 2020. In Italy, Confindustria Moda said Italian manufacturers cumulated more hours of the local partial unemployment schemes in May 2020 alone than for the entire year 2019. This will, in the short term, avoid massive damage to the aggregate output potential of the industry.
- The European industry has also become more competitive. In 2009, manufacturers European were struggling with the increased penetration of foreign goods, with Eu

- rope's trade deficit for textile products doubling between 2001 and 2010 (2001 was the year China entered the World Trade Organization). This is no longer the case - the deficit has been broadly flat since growth in the past years.
- many have seen their market shares been at play in past years. in global trade increase since 2014. The same is true for leather goods and accessories: Global trade in these products rose from USD43bn in 2009 to USD88bn in 2019. Over this period, Italy's global market share went up from 10% to 14%, while France's rose from 28% to 32%. Efforts by the industry to improve its product mix and increase its productivity can also be seen in apparent labor productivity data from Eurostat: between 2009 and 2017, gross

value added per employee in the European industry increased by about 25% for apparel, 30% for textiles and 48% for leather goods, footwear and accessories.

2015. Secondary producers includ- Still, aggregate European T&A 2021 ing the UK, the Netherlands, Den-turnover would remain 7% below its mark, Poland and Romania were all 2019 levels. Looking beyond 2021, we seeing significant manufacturing anticipate growth to be harder to achieve and dependent on strong as-This reflects a shift in the industry's sumptions regarding, among others, structure: The apparel segment, international tourist flows. While the nawhich accounted for 40% of total tional and European trade associations industry turnover in 2009, now are already engaged with key stakemakes up less than 34% but with a holders to define sector-specific recovery more solid and competitive manu- measures, we believe public policy could facturing base focusing on higher- help rekindle growth in the industry and end items - France, Italy and Ger- consolidate the positive trend that has



AN ACCELERATION OF THE EUROPEAN SUSTAINABILITY AGENDA COULD SPEED UP THE RECOVERY

tion to weaving and sewing through to encourage quality over quantity... tal interests.

From vegetal and synthetic fiber produc- Shift away from fast-fashion and aggregate sector data. Looking at the

nence of fast fashion appears clearly in consumer mindset.

volume retail sales of T&A in specialized yarn dyeing, textile manufacturing is European fast-fashion retailers such as stores and population over time (Figure estimated to generate about 10% of Zara (Spain), H&M (Sweden), C&A 7), we find that consumption has grown global greenhouse gas emissions². Tex- (Netherlands) and Primark (UK) have by more than +25% in Europe, with tile production is intrinsically carbon in- played an instrumental role in shaping France (+31%) and the UK (+87%) seeing tensive, generating about 17 metric tons competition in mass-market fashion, the strongest increases since 2000. Adof CO₂ equivalent per metric ton of tex- Relying on a combination of global ding online retail sales of clothing, which tile vs 1 metric ton for paper and 3.5 supply chains, high collection turna- are not captured in Eurostat's dataset, metric tons for fabric. The trend towards round and low-priced items, fast-fashion would only make the trend even more higher per capita consumption could comes with very tangible benefits for obvious (clothes have among the send this share to more than 25% by consumers, who have enjoyed more pro-highest online penetration rates across 2050. Beyond GHG emissions, the indus-duct variety at lower prices in the past product categories). Interestingly, howetry is also a major consumer of water decades. This has contributed to the ver, data suggest that "peak clothing" resources and an estimated 73% of all growing preference for quantity over has begun to materialize, with per capitextile production is either incinerated or quality among consumers. Between ta consumption stabilizing in past years. landfilled. We believe public policy 2000 and 2015, average clothing utiliza- The growth of the second-hand market, aimed at accelerating the various industion (the average number of times a impossible to measure precisely but easy try initiatives to reduce its environmental piece of clothing is worn) declined by to observe with the booming use of clasfootprint would tip the competitive about 35%, while global volumes sold sified ads and peer-to-peer margame in favor of European manufactur- doubled to reach more than 100 billion ketplaces such as Vinted (Lithuania), is ers and align business and environmen- items per year³. The growing promi- another hint of a shift in the European

Figure 7: Per capita volume retail sales of textile, clothing, footwear accessories in specialized store (2000=100). France United Kingdom European Union 190 180 170 160 150 140 130 120 110 100 90 $2000\,2001\,2002\,2003\,2004\,2005\,2006\,2007\,2008\,2009\,2010\,2011\,2012\,2013\,2014\,2015\,2016\,2017\,2018\,2019$

Sources: Eurostat, World Bank, Euler Hermes, Allianz Research calculations

8

² Ellen MacArthur Foundation, A new textiles economy: Redesigning fashion's future

³ Ibid

duction

Because Europe has comparatively stricter labor regulation, higher labor costs and a narrower labor force, European manufacturers cannot compete with foreign competition when it comes to supplying the vast majority of European clothing retailers with large quantities of low-priced apparel. Should per capita consumption return to its past levels and consumers trade quantity off for quality, then the story may be different because labor costs are only a fraction of the final retail price.

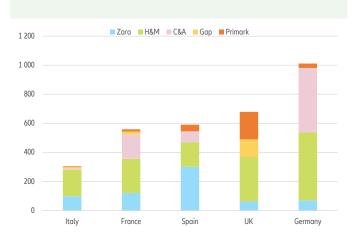
Several studies have tried to assess the exact share of garment manufacturing labor costs in the retail price of items typically bought in fast-fashion stores in mature economies. A study from Deloitte on the Australian market estimates this share at 4% for an average t-shirt⁴, an estimate consistent with another study. The preference for quality over quantity tax rate and wholesale and retail pean, Northern African and Asian manu- in Europe (Figure 9). markups constant as a percentage of facturers, the country's industrial produc-

the European Commission's "zero waste largest prevent future waste generation⁷.

Italy shows consumer preference for quality supports local manufacturina

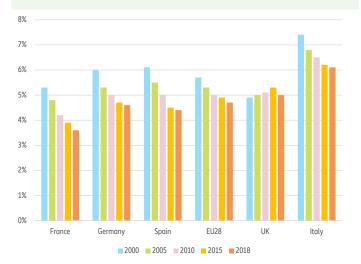
... and imports over local apparel pro- costs, a threefold increase in labor costs tion of apparel has shrunk by "only" -26% translates into a 16.5% increase in the since 1991, while the industries of France retail price⁶, while a fivefold increase and Germany saw their production fall would lead to a 32.7% increase in the by -97% and -89%, respectively. As seen retail price. For the average European previously in Figure 7, Italy's per capita consumer to keep their clothing spend- consumption of apparel has been flat ing unchanged despite higher prices, for the past ten years, consistent with they would need to cut purchased vol- Figure 8, which compares the footprint umes by 14% and 25%, respectively. In of leading fast-fashion retailers across other words, they would need to return Europe's five largest markets – Italy falls to their purchasing behavior of the far behind other large European retail 2000s. While more precise calculations markets. While growing, large fastwould need to factor differences in labor fashion retailers have much lower peneproductivity, lower freight costs and tar- tration in a country where independent iffs, etc. we believe that the quantity-for- retailers connected to local manufacquality trade-off makes environmental turers still control a sizeable share of the and business sense. It is also aligned with market. Unlike fast-fashion retailers, the Italian clothing chains hierarchy" whose highest priority is to (Calzedonia, Miroglio Group, Max Mara) own manufacturing capacities and rely on a mix of factories in Italy, Eastern Europe and North Africa. Italy's preference for higher quality but more expensive apparel is also reflected in the expendifrom Swiss-based non-governmental is actually one of the explanations for ture of its households, which still dediorganization Public Eye for a EUR25 Za- Italy's resilient T&A industry. Despite cate more than 6% of their consumption ra hoodie made in Turkey⁵. Keeping the growing competition from Eastern Euro- to clothing and footwear – a record high

Figure 8: Top fast-fashion retailers presence in Europe's largest markets (stores)



Sources: Euler Hermes, Allianz Research calculations based on information retrieved in July 2020

Figure 9: Share of clothing and footwear in final household consumption (current prices, %)



Sources: Eurostat, Euler Hermes, Allianz Research calculations

⁴See Deloitte Access Economics for Oxfam Australia, A Living Wage in Australia's Clothing Supply Chain, Sep 2017

⁵ See Public Eve. Der Preis eines Zara-Pullover. Dec 2019

⁶ The mean nominal hourly labour cost in the manufacturing sector for Turkey stands at about USD6 vs USD12 for Poland, USD26 for Spain and USD32 for Italy (International Labour Organisation).

⁷ Introduced in 2008, the Waste Framework Directive defines waste prevention as the best option, followed by re-use, recycling, other forms of recovery (energy generation...) and landfill as last resort.

tal targets with the interests of local and stable trade environment. manufacturers. Shaping demand for the best, while a challenging and slow pro- Encourage the transition from linear to cess, can typically be achieved by:

- Increasing consumer awareness of and insisting on the importance of individual responsibility in achieving collective targets;
- sumption behaviors.

from imports to locally made goods a is at the very early stages of its transition major boost for the local apparel indus- - the industry uses 97% of virgin feedfor Germany and France would be duction and 73% waste goes to landfills equivalent to an 8% increase in Europe- or incinerators9. For environmental and an apparel manufacturina turnover.

when it comes to some supply-side in- cled materials would need to be cap-European manufacturers. The question world's largest market for clothing and facturers an edge over competitors is itive industry to capture the opportunities widely debated. Textile supply chains are of circular manufacturing. Stakeholders arguably the most integrated of all in- have nowhere to look but at other secrely extensively on raw materials and established to identify priorities: semi-finished goods imported from the • rest of the world - the most immediate impact of a possible carbon adjustment tax would be to increase costs for European manufacturers, hence reducing their competitiveness. In its strategic

NGOs and trade associations have for roadmap for the industry outlined in long addressed the need for consumer June 2020, industry trade association behaviors that would align environmen- Euratex reiterated its support to an open

circular manufacturing

the environmental impact of fashion, The 2018 circular economy package • adopted by the EU has laid out new objectives with regard to the separate collection and treatment of textile waste -Improving buyer information and the average waste generation stands at transparency to help willing consum- about 19kg per capita, with clothing ers shift to more sustainable con- alone accounting for about two thirds of the total⁸. The benefits of a transition to • The sheer size of European clothing im- circular manufacturing are obvious from ports would make any significant shift an environmental point of view and T&A try: a 10% reduction in apparel imports stock (plastics, cotton, linen, etc.) for probusiness interests to align, the partial NGOs and trade associations diverge substitution of primary resources by recycentives that would tip the scale back for tured by European manufacturers. The • of whether carbon taxation would be the second-largest manufacturer of texefficient to reduce negative externalities tile and apparel, Europe not only has a (i.e. pollution) and give "greener" manu-large reservoir to tap, but also a competdustries and European manufacturers tors where circular manufacturing is well-

> On the supply side, the financing of separate collection, sorting and treatment of waste can be tackled by taxes based on the "polluterpays" principle - much like it is the case, in several countries, for elec-

- tronic goods, domestic appliances or furniture. This also creates an incentive for producers to find ways to reduce their environmental impact. France is the only country in Europe where a so-called "extended producer responsibility", with significant progress made (Box 1).
- Taxation has also proven efficient to encourage re-use or recycling vs more polluting alternatives. For 2035, Europe is targeting that only 10% of all municipal waste go to landfills, vs 43.6% in 2006 and 23.5%
- Additional public support would also be most welcome to accelerate R&D projects focusing on improving textile waste collection, treatment, reuse and recycling – technologies are much less mature than in the glass or paper industries. Technical barriers to greater incorporation of recycled material remain very significant, and textile fibers do not have an infinite lifetime.
- Demand must also be supported to create a genuine market for recycled materials and consumer goods incorporating recycled materials, typically by assigning targets for the incorporation of recycled material across products for which it is feasible. In other sectors, public procurement has contributed to stimulate demand and encourage adoption from private sector industries.

10

Box 1 - The French extended producer responsibility (EPR) scheme for T&A

France created an EPR scheme in 2007 to improve textile waste management. A producer responsibility organization (PRO), Eco TLC, was created to improve the collection, sorting and recycling of textile waste, thanks to funding paid for by producers and calculated based on their estimated waste generation. Eco TLC contracts with private firms to invest in collecting facilities, sorting infrastructure, R&D program, etc. to reach the objectives set out by public authorities. The polluter-pays scheme creates an incentive for manufacturers to reduce their waste generation, while the PRO is incentivized to find the most efficient solutions to reach its targets. Textile waste collection tonnage in France has leapt from 17% of total marketed textiles in 2007 to about 40% in 2018, of which 40% were reused, recycled or transformed into fuel. While the PRO has lagged behind the objectives initially set out at its creation, it still is referred to by NGOs as an example for other countries to follow.

Help manufacturers embrace the opportunities of new technologies

The digital revolution is yet to come in the T&A industry. In a seminal research paper on the potential of job automa- tors such as the automotive industry, facturers - and stimulate the robot intion risks¹⁰, researchers Carl Benedict Frey and Michael Osborne found that jobs typical of the garment industry had a particularly high probability of being computerized by 2023, with tailors standing at 83% and hand sewers at 99%. However, because technology has fallen behind expectations and because it does not alone guarantee returns on investment, the manufacturing of apparel has not changed much in the past years, still relying on a labor force. The sneakers in Germany and the U.S., is a more concrete example of the challenges met by industry big names to profitably automate production. While industrial robot sales to the sector have seen growing interest among top manu

modest compared to those of other sec- the competitiveness of European manuwhere annual deliveries exceed 100,000 dustries of Germany and Italy, the

Yet this does not mean that a boost in manufacturers, respectively. apparel manufacturing productivity will Beyond automation, apparel manufacnot ever happen – real progress is being turers should also accelerate their efforts made despite economic and technical to develop their e-commerce capabilichallenges, with a combination of the ties. While e-commerce has not been labor force and collaborative robots enough to compensate for store closeen as having a strong potential¹¹. One sures, large retailers did get some relief of the reasons behind the comparatively with online sales booming at the height slower adoption of new technologies in of the Covid-19 crisis: Gap, H&M and the industry is its fragmented structure - Inditex saw online Q1 sales growing by case of Adidas, which gave up on using SMEs account for 60-70% of industry 10%, 48% and 50%, respectively. The in-3D printing technologies to manufacture turnover in Europe, which is twice the centive is particularly high for high-end average of the wider manufacturing and luxury item manufacturers to recon**sector** (Figure 11).

> Because increased automation would help reduce Europe's comparatively high -cost structure, support funds to help sector SMEs invest in more advanced

facturers (Figure 10), they remain very manufacturing processes could increase world's second- and third-largest robot

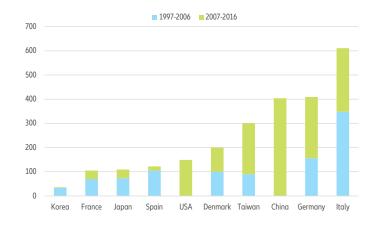
> nect with their international customers in times of lasting travel restrictions.

Figure 10: Cumulated industrial robot sales to the textiles, apparel and footwear industries (unit)



Sources: International Federation of Robotics, World Robotics, 2017

Figure 11: Share of small and medium-sized enterprises in industry turnover (%)



Sources: Eurostat, Euler Hermes, Allianz Research calculations

¹⁰ Carl Benedikt Frey and Michael Osborne, The Future of Employment: How Susceptible are Jobs to Computerisation?, 2013

¹¹ David Kucera and Fernanda Bárcia de Mattos Automation, Employment, and Reshoring: Case Studies of the Apparel and Electronics lindustries, April 2020

APPENDIX

Scope of the report

This report focuses on the textile and apparel (T&A) industry as defined by the European industry standard classification system (NACE), covering companies with the following activity codes:

- C13 Manufacture of textiles
- C14 Manufacture of wearing apparel
- C15 Manufacture of leather and related products (inc luggage, handbags and footwear)

Data for retail activities use an aggregate encompassing the retail of textiles (47.51), clothing (47.71), footwear and leather goods (47.72) in specialised stores.

Data for trade are based on HS4 product codes and include, depending on the indicators, one or more of the following items:

41	Raw hides and skins (other than furskins) and leather
42	Articles of leather; saddlery and harness; travel goods, handbags and similar containers; etc.
43	Furskins and artificial fur; manufactures thereof
50	Silk
51	Wool, fine or coarse animal hair; horsehair yarn and woven fabric
52	Cotton
53	Other vegetable textile fibres; paper yarn and woven fabrics of paper yarn
54	Man-made filaments; strip and the like of man-made textile materials
55	Man-made staple fibres
56	Wadding, felt and nonwovens; special yarns; twine, cordage, ropes and cables and articles thereof
58	Special woven fabrics; tufted textile fabrics; lace; tapestries; trimmings; embroidery
59	Impregnated, coated, covered or laminated textile fabrics; textile articles etc.
60	Knitted or crocheted fabrics
61	Articles of apparel and clothing accessories, knitted or crocheted
62	Articles of apparel and clothing accessories, not knitted or crocheted
63	Other made-up textile articles; sets; worn clothing and worn textile articles; rags
64	Footwear, gaiters and the like; parts of such articles
65	Headgear and parts thereof
66	Umbrellas, sun umbrellas, walking sticks, seat-sticks, whips, riding-crops and parts thereof
67	Prepared feathers and down and articles made of feathers or of down; artificial flowers; etc.

Estimates of 2020 turnover and potential company and employment eliminations

We have estimated 2020 and 2021 turnover impact as well as potential company and employment eliminations taking account a mix of past data (industry turnover, company and employment data, industrial production, etc.) at a segment level as well as assumptions on future GDP growth in Europe's five largest economies.

OUR TEAM

Chief Economist of Allianz and Euler Hermes



Ludovic Subran Chief Economist ludovic.subran@allianz.com

Head of Economic Research, Euler Hermes

Head of Capital Markets Research

Head of Insurance, Wealth and Trend Research



Alexis Garatti alexis.garatti@eulerhermes.com



Eric Barthalon eric.barthalon@allianz.com



Arne Holzhausen arne.holzhausen@allianz.com

Macroeconomic Research



Ana Boata Head of Macroeconomic Research ana.boata@eulerhermes.com



Katharina Utermöhl Senior Economist for Europe katharina.utermoehl@allianz.com



Selin Ozyurt
Senior Economist for France
and Africa
selin.ozyurt@eulerhermes.com



Françoise Huang Senior Economist for APAC francoise.huang@eulerhermes.com



Manfred Stamer Senior Economist for Middle East and Emerging Europe manfred.stamer@eulerhermes.com



Georges Dib Economist for Latin America, Spain, Portugal and Trade georges.dib@eulerhermes.com



Dan North Senior Economist for North America dan.north@eulerhermes.com

Capital Markets Research

Insurance, Wealth and Trends Research



Jordi Basco Carrera Fixed Income Strategist jordi.basco_carrera@allianz.com



Michaela Grimm Senior Expert, Demographics michaela.grimm@allianz.com



Lina Manthey Equities Strategist lina.manthey@allianz.com



Markus Zimmer Senior Expert, ESG markus.zimmer@allianz.com



Patrick Krizan Senior Economist for Italy and Greece, Fixed Income patrick.krizan@allianz.com



Patricia Pelayo Romero Expert, Insurance patricia.pelayo-romero@allianz.com

Sector Research



Maxime Lemerle Head of Sector Research maxime.lemerle@eulerhermes.com



Catharina Hillenbrand-Saponar Sector Advisor for Energy, Metals, Machinery and Equipment catharina.hillenbrand-saponar@eulerhermes.com



Marc Livinec
Sector Advisor for Chemicals,
Pharmaceuticals, Transportation,
Agrifood and Transport Equipment
marc.livinec@eulerhermes.com



Aurélien Duthoit Sector Advisor for Retail, Technology and Household Equipment aurelien.duthoit@eulerhermes.com

RECENT PUBLICATIONS 16/07/2020 Calm before the storm: Covid-19 and the business insolvency time bomb 16/07/2020 European banks: Could EUR300bn of additional NPLs crunch the recovery in Europe? 15/07/2020 Covid-19: Contagion risks also apply to markets 06/07/2020 Coping with Covid-19 in differing ways 03/07/2020 Chinese banks put to the test of RMB8tn of Covid-19 problematic loans 01/07/2020 Allianz Global Insurance Report 2020: Skyfall 30/06/2020 Money is power: Can a country's culture increase the risk of payment defaults? When Main Street makes it to Wall Street 26/06/2020 19/06/2020 Construction companies in Europe: Size does matter 17/06/2020 The risk of 9 million zombie jobs in Europe 12/06/2020 Have policymakers created Pavlovian markets? 09/06/2020 Rough landing: 2020 will be a terrible year for air transportation 04/06/2020 Social Risk Index: Structural determinants of social risk 04/06/2020 Managing the curves: Shaping the Covid-19 recovery 02/06/2020 European corporates loading up cash against uncertainty 28/05/2020 Allianz Global Pension Report 2020—The Silver Swan 26/05/2020 Global trade: Recession confirmed, watch out for a double-whammy blow due to protectionism 19/05/2020 A German-French trial balloon on fiscal union 19/05/2020 The ECB is also here to close governments' financing gap 18/05/2020 Retail in the U.S.: Department store bankruptcies are only the tip of the iceberg

Discover all our publications on our websites: Allianz Research and Euler Hermes Economic Research

Director of Publications: Ludovic Subran, Chief Economist

Allianz and Euler Hermes Phone +33 1 84 11 35 64

Allianz Research

https://www.allianz.com/en/

<u>economic</u> research

Königinstraße 28 | 80802 Munich |

Germany

allianz.research@allianz.com



allianz



@allianz

Euler Hermes Economic Research

http://www.eulerhermes.com/economic-

<u>research</u>

1 Place des Saisons | 92048 Paris-La-Défense

Cedex | France

research@eulerhermes.com



euler-hermes



@eulerhermes

FORWARD-LOOKING STATEMENTS

The statements contained herein may include prospects, statements of future expectations and other forward-looking statements that are based on management's current views and assumptions and involve known and unknown risks and uncertainties. Actual results, performance or events may differ materially from those expressed or implied in such forward-looking statements.

Such deviations may arise due to, without limitation, (i) changes of the general economic conditions and competitive situation, particularly in the Allianz Group's core business and core markets, (ii) performance of financial markets (particularly market volatility, liquidity and credit events), (iii) frequency and severity of insured loss events, including from natural catastrophes, and the development of loss expenses, (iv) mortality and morbidity levels and trends, (v) persistency levels, (vi) particularly in the banking business, the extent of credit defaults, (vii) interest rate levels, (viii) currency exchange rates including the EUR/USD exchange rate, (ix) changes in laws and regulations, including tax regulations, (x) the impact of acquisitions, including related integration issues, and reorganization measures, and (xi) general competitive factors, in each case on a local, regional, national and/or global basis. Many of these factors may be more likely to occur, or more pronounced, as a result of terrorist activities and their consequences.

NO DUTY TO UPDATE

The company assumes no obligation to update any information or forward-looking statement contained herein, save for any information required to be disclosed by law.