

Textiles

2025

**Projection bases on 125 national textile market sizes from
high income nations to least developed countries**

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Preface:

Impulse for this new report, planned to be updated in fourth quarter 2021, is the ongoing deceleration of economic growth that is increasingly affecting the textile business and final end-use. The national market size of 173 countries in 2018, final demand at retail stage, is basis for the 2025 prediction at national level to draw a conclusion from demand to supply, understood as production of natural and manmade fibers as well as spunlaid nonwovens. This approach appears to be more reliable than extrapolating historical production data or future capacity additions given the fact that some manmade fiber segments have been suffering from excess capacity for quite a long time already.

The base year 2018 was chosen to lessen impacts from downward revisions of economic growth and worsening business and consumer confidence. A lack of full-year 2019 data at that point of time implies too much speculation, which is inappropriate in today's world full of uncertainties. Production data by country, corresponding trade flows from the chapters 50-63 and an estimated average waste rate of 5% result in national market sizes.

The 2018 market size is basis for formula-based predictions using demographics, national GDP growth rates and projected income changes with different weighting depending on income category to arrive at a likely 2025 level.

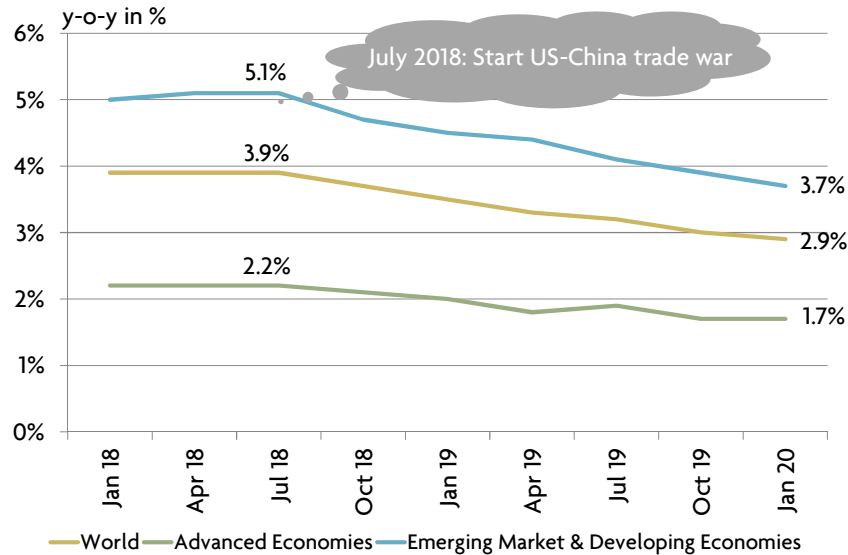
The sum of 173 nations and territories together with estimates for non-analyzed countries with joint population of 45 million delivers a world consumption figure that finally can be translated into a likely volume of production.

Target:

This report provides data on market size and per capita consumption for 173 countries to arrive at a global volume of demand for the years 2018 and 2025. The base year 2018 was chosen to lessen impacts from the U.S.-China trade war that started mid-2018 with U.S. administration imposing sweeping tariffs on China. Growing trade tensions, also between Japan and Korea, have gradually caused world economy to decelerate as illustrated in the below chart with world economic outlook projections from IMF for 2019 continuously softening from 3.9% global growth published in July 2018 to just 2.9% released at the World Economic Forum in Davos in January 2020.

Hence, the dent in long-term textile demand will be visible in 2019 and most probably for most of the time in 2020 as well. Using such a nontypical year as reference for long-term projections would deliver misleading growth rates.

World Economic Outlook Projections for 2019



Source: International Monetary Fund

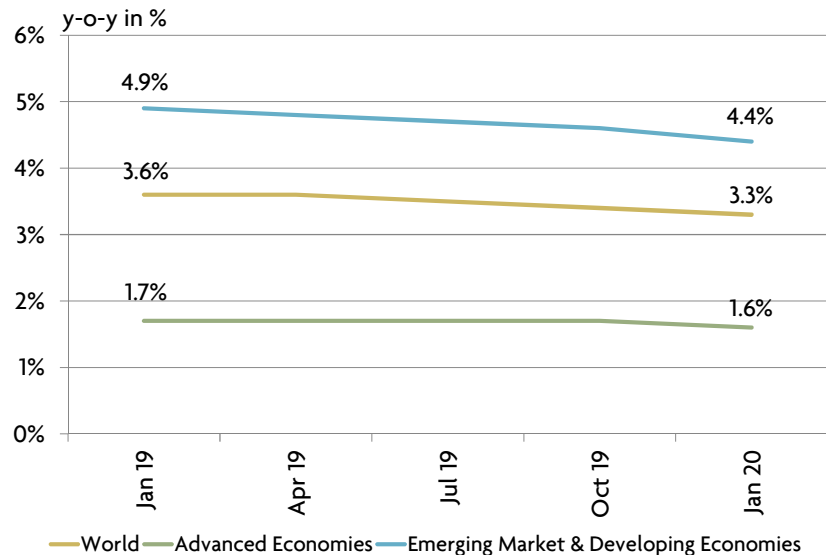
The 2018 market size is basis for formula-based predictions using demographics, national GDP growth rates and projected income changes with different weighting depending on income category to arrive at a likely 2025 level.

The historic development of market size and per capita consumption is described for selected countries between 2005 and 2018 including the forecast for 2025. Corresponding data for all of the abovementioned 173 countries include figures for 2018 and 2025 in income-divided tables.

Projections for 2020 have also been downwardly revised from global growth of 3.6% released in January 2019 to 3.3% at World Economic Forum in Davos in January 2020. Weakening growth dynamics still refer to a number of uncertainties despite a Phase One trade deal between U.S. and China in which China committed to buy USD77 billion in additional goods and services in 2020 and USD123 billion in 2021. Either amount will mark a record-breaking acceleration for U.S. exports to China. The trade dispute between Japan and Korea may de-escalate after both announced senior-level talks in December. Trade tensions have upset supply chains, affected global growth outlook and led manufacturing sectors either in recession or close to recession territory.

Global uncertainty is further associated with the U.S. elections, the future of Brexit, tensions between the United States and Iran, conflicts in Mideast, Iraq, Afghanistan and South Sudan, civil war in Libya, riots in Hong Kong and above all latest threat from coronavirus. The scale of the epidemic is still hard to measure and the coronavirus seems poised to go global. The epidemic has travelled to 29 countries (Feb. 15) and further epidemics seemed possible.

World Economic Outlook Projections for 2020



Source: International Monetary Fund

Fears that the coronavirus will ravage global supply chains rooted in China are spreading fast. Extraordinary travel restrictions on travelers to and from China are a threat to global economy and China's manufacturing industry. A particular concern is the potential that the virus could start spreading in countries with weaker health systems and cause a pandemic. Force majeure certificates for companies facing problems to meet their international contractual commitments due to the epidemic lead to additional risks for international trade and may question China's ability to lift imports from the U.S. by USD200 billion over the next two years under the Phase One deal.

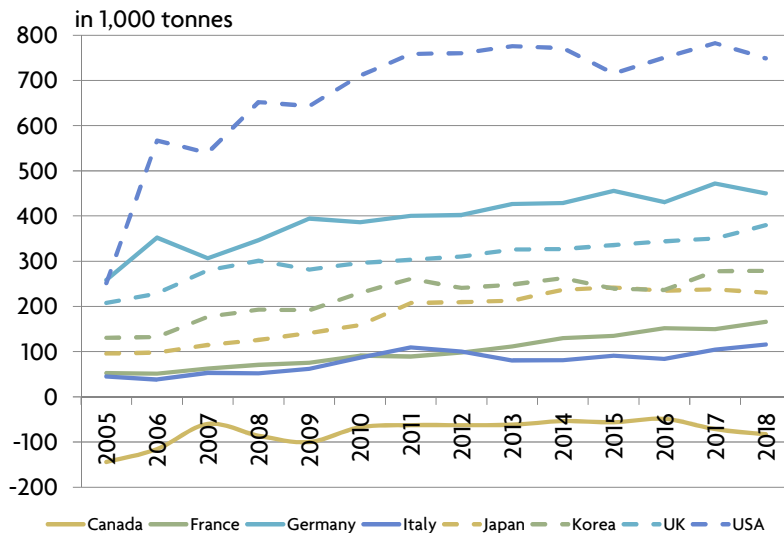
The latest IMF data from January did not predict the early 2020 arrival of a potentially devastating pandemic, hence, expectations of accelerated growth to 3.3% are now being challenged by the unknown course of the coronavirus.

New Approach:

Starting point is the volume entering textile processing including cotton use, production quantity of all remaining fibers in the absence of global inventory statistics and spunlaid nonwovens output, which by now accounts for almost 1 kg per head textile demand. New is the attempt to take into account losses during the different processing steps from secondary spinning to fabric making and final cut, make and trim operations. For that purpose, available volume of fiber material after trading activities has been on average reduced by 5% in each country.

Furthermore, handling of second hand clothing articles (trade code 6309) has been adjusted to the income category of countries. Imports of second hand clothing articles are excluded for high income countries deriving from the thinking that consumers in such countries usually afford to buy new clothes. Exports of second hand clothing articles are generally excluded as they typically do not affect current textile consumption, rather the result of cleaning out the wardrobe, unless trade performance suggests significant transshipments, e.g. in Malaysia.

Net Trade of Second Hand Clothing Articles



Source: International Trade Centre

As a general rule, high income countries are net exporters of worn clothing. Hence, the new definition results in higher per capita demand as before. This leads to annual upward revisions for a number of high income nations like Australia, France, Germany, Italy, Japan, Korea, Norway, Switzerland, UK and the United States.

Surprisingly, Canada has been experiencing import surpluses. General notion for this exceptional development is that a considerable portion turns out to be not resalable and will not be used for local consumption. In case of Canada, the consumption per capita history finds itself on 8% lower level than before as an average volume of 77,000 tonnes import surplus of second hand clothing articles has been eliminated. Slovakia is another high income nation with a permanent import surplus. Adjustments have lowered annual demand level by about 2 kg per head on average during the quota-free period.

Income Categories:

This report bases on the analysis of latest textile consumption in 125 countries from high income nations to least developed countries. Given the enormous range in particular for the high income category from USD14,000 per capita to rich Liechtenstein with gross national income (GNI) per capita more than tenfold, three sub-categories have been introduced:

- GNI > USD50,000
- GNI between USD25,000 and USD50,000
- GNI between USD14,000 and USD25,000

A similar breakdown in three categories was applied in the upper middle-income class:

- GNI between USD8,000 and USD14,000
- GNI between USD6,000 and USD8,000
- GNI between USD4,000 and USD6,000

The lower middle-income group between USD1,100 and USD4,000 was not further subdivided like the group of 47 least developed countries according to United Nations comprising about one billion people. This group of countries was expanded by Syria and Tajikistan, both with gross national income per capita of around USD1,000.

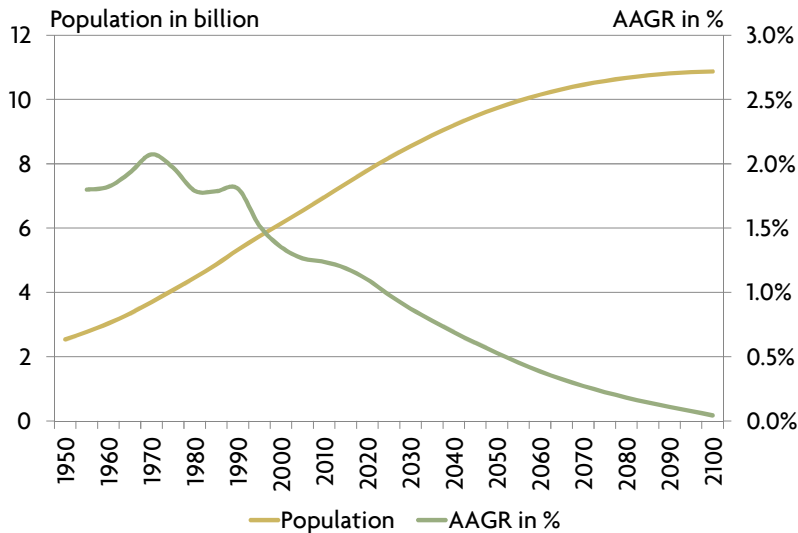
North Korea due to insufficient data quality and small vacation islands like Jamaica, Mauritius, Trinidad and Tobago, Fiji and other low population islands with joint population of about 45 million are not considered and finally estimated to arrive at a global picture.

Demographics:

Population growth is one of the main drivers for textile demand but the effect arising from demographics has been continuously softening. Dynamics at present reveal a global average annual growth rate of about 1.0%, equal to the period from 2018 to 2025 in this report.

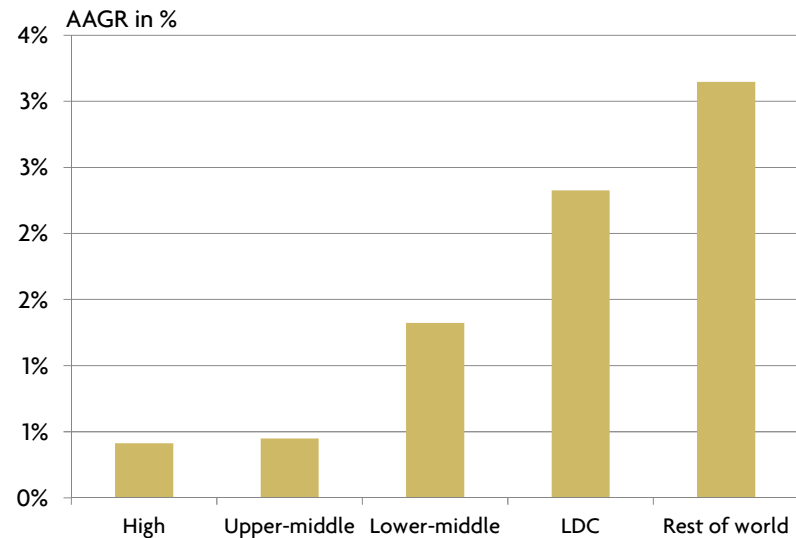
Another factor is further weakening the impact from population growth as shown in the below chart on the right hand side. Population increase in relative terms is the lowest in high income nations that have the highest consumption of textiles per head. About 65 countries with a gross national income per capita in 2018 exceeding USD8,000 comprise 3.3 billion consumers in 2018 and are anticipated to add just 83 million new consumers by 2025. In contrast, 76 nations in the lower-middle income class and the least developed countries are predicted to grow population by 433 million new consumers until 2025 to reach a population size of 4.1 billion.

World Population 1950 - 2100



Source: United Nations; World Population Prospects 2019

Population Growth 2018 – 2025 per Income Category



Source: U.S. Census Bureau, World Bank

Supply and Demand:

The per capita figure mentioned in „The Fiber Year 2019“ report specifies the fiber production volume including cotton use per head while data in this report refer to final demand at retail stage, which is considerably lower due to a number of reasons. Thus, it is no surprise that fashion industry in particular has been dubbed as one of the most wasteful industries on earth and fast fashion will certainly not work against this image.

The gap between supply and demand volumes primarily arises from waste along the value chain for different processing technologies at various degrees. It is negligible at circular knitting and legwear but may become quite substantial in flat and warp knitting like also along the weaving route. Cut, make and trim operations further add to waste volumes depending on the specific piece of garment. Finally, the destruction of unsold clothing items and the discarding of damaged articles from online returns scale up the waste volume. A conservative waste rate of domestically available fiber material after trading of 5% was assumed for each country.

Nevertheless, some uncertainties still remain to arrive at a realistic size of final demand by country for essentially four reasons:

- 1.) Unofficial trade, which is believed to play a significant role in some countries, e.g. given the 4,000 kilometer Chinese-Russian border or the supply of landlocked countries like Afghanistan.
- 2.) Another condition affecting the global level arises from changes in manmade fiber inventories as there still is no global data available for mainstream fiber types like polyester, nylon and viscose. Expanded plant sizes and the transition from extruder spinning to continuous polymerization polyester plants have been attaching more relevance to this factor.
- 3.) Unreported manufacturing activities for instance on handlooms.
- 4.) Textile materials being part of articles that are beyond the textile trade chapters from 50 to 63 such as shoes, umbrellas, sunshades, blinds, automotive and aviation industry, tires, shipbuilding, furniture, sleeping bags, filling materials to name just a few. This is primarily relevant for export-oriented industries as integration of such trade flows would lower their national textile demand.

Argentina:

The upper-middle income country with GNI per capita of USD12,390 produced cotton, wool, manmade fibers and spunlaid of about 350,000 tonnes while local demand was around 460,000 tonnes in 2018. The country has been net importer most of the time for manmade fibers and spunlaid whereas cotton and wool trade generated export surpluses since 2009. In total, net exports of fibers, yarns and spunlaid were quite high at 54,000 tonnes in 2018.

The 2025 prediction of the national market size accounts for 514,000 tonnes, up 1.6% on average annual rate, and lifting future textile per capita demand from 10.3 kg (2018) to 10.9 kg (2025). This value clearly remains below the average of the income class, partly justified by above-average temperature and below-average precipitation. More important, the country is in recession caused by a currency collapse that struck mid-2018. Inflation rate hit 53.8% in 2019, climbing to its highest level in almost three decades. Recently announced emergency measures include tax hikes on foreign currency purchases, agricultural exports and car sales. Argentina's economy is set to shrink for a third consecutive year in 2020 although the pace of contraction should ease.

	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018
PER CAPITA INCOME (current USD)										
· GDP	5'164	10'413	12'788	13'890	14'489	13'209	14'895	12'773	14'588	11'658
· Adjusted net national income	3'794	8'810	11'009	11'250	11'255	10'607	12'003	11'006	12'366	9'566
POPULATION										
· POPULATION (million, mid-year)	39	41	42	42	43	43	43	44	44	45
TEXTILE CONSUMPTION AT RETAIL STAGE										
· Average demand in kg / head	9.5	10.0	10.5	9.7	9.1	8.5	9.6	10.0	10.3	10.3
· Market size in 1,000 tonnes	375	413	439	408	389	364	416	438	456	461

Argentina:

in 1,000 tonnes	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018
SUPPLY OF FIBERS, YARNS & SPUNLAIDS										
· Plant and Animal Fibers	181	325	239	186	330	256	243	206	253	269
· Manmade Staple Fibers & Filament Yarns	70	56	54	58	58	57	53	54	58	31
· Spunlaid Nonwovens	8	13	13	17	25	28	36	42	47	51
= TOTAL	259	393	306	261	413	341	332	302	358	351
		22.5%	-22.1%	-14.9%	58.6%	-17.5%	-2.6%	-8.9%	18.3%	-1.9%
SUPPLY in kg / head										
	6.6	9.5	7.3	6.2	9.7	7.9	7.6	6.9	8.1	7.8
TRADE OF FIBERS, YARNS & SPUNLAIDS										
· Imports	128	131	131	126	121	110	115	121	106	108
· Exports	115	132	180	144	99	164	110	122	94	162
= Export Surplus (+) or Deficit (-)	-13	1	49	19	-22	54	-6	1	-13	54
= NATIONAL AVAILABILITY AT RETAIL										
	375	413	439	408	389	364	416	438	456	461
		9.6%	6.3%	-7.1%	-4.6%	-6.5%	14.4%	5.2%	4.2%	1.1%
AVAILABILITY in kg / head										
	9.5	10.0	10.5	9.7	9.1	8.5	9.6	10.0	10.3	10.3

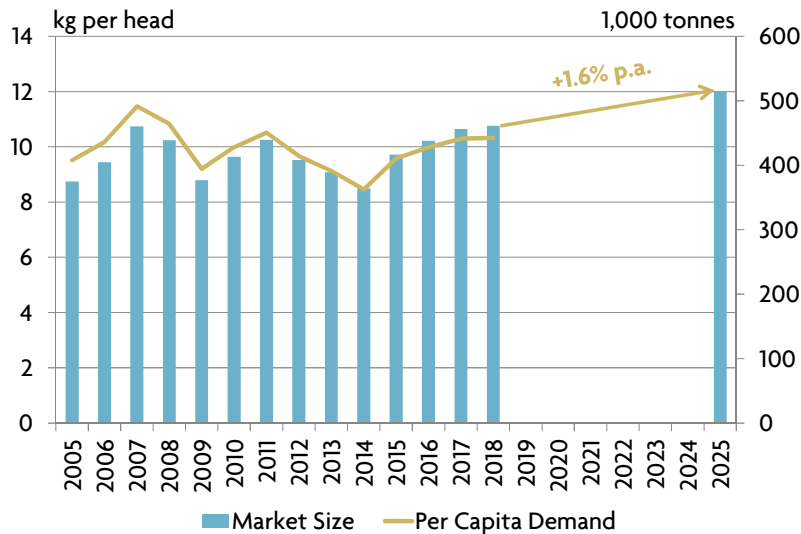
Argentina:

The long-term average textile per capita demand accounted for 9.9 kg. In 2018, it has improved to reach 10.3 kg but yet another recession will worsen the outlook even if the 1.2% higher industrial production in December 2019 meant the first expansion in 20 months according to data from National Statistical Institute (INDEC). Consumer confidence for more than two years remained below the 50-threshold that separates optimism from pessimism.

The current recession began already in 2018 in South America’s second largest economy that is expected to contract for a second year in 2019 and a third in 2020. Inflation is above 50%, and the peso is on track to be the worst performer in emerging markets for the fourth straight year.

The country is not engaged in official second hand clothing trade and increasingly relies on apparel imports.

Argentina: Textile Per Capita Consumption 2005 - 2025



Latest GDP projections released by IMF suggest economy to grow from 2021 and accelerate economic growth from 1.4% in 2021 to beyond 3% in 2023/24.

Although Argentina has spent a third of the time in recession since 1950, 2.5 million new consumers until 2025 together with the optimistic growth prediction after 2021 may lift national market size to 514,000 tonnes, equal to a per capita demand of 10.9 kg.