

Spinning / Texturing
Weaving / Knitting
Finishing

INTERNATIONAL PRODUCTION COST COMPARISON 2018

(revised edition)

INTERNATIONAL TEXTILE MANUFACTURERS FEDERATION
FÉDÉRATION INTERNATIONALE DES INDUSTRIES TEXTILES
INTERNATIONALE VEREINIGUNG DER TEXTILINDUSTRIE



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The world's primary textile industry is engaged in a continuing modernization and restructuring process, spurred by the advent of entirely new or more sophisticated textile technology together with increasing competition for markets and products. Originating in the industrialized countries, the process has spread to newly industrialized and to developing countries, many of which are turning to the latest textile technologies as a means of ensuring their competitive position, especially in export markets. This trend has been clearly evidenced by the survey on world textile machinery shipments conducted by ITMF since 1974 (International Textile Machinery Shipment Statistics).

ITMF's International Production Cost Comparison, first published in 1979, is designed to trace the implications of the growing capital intensity in the primary textile industry. Thus, the presentation in this study of manufacturing costs and of total yarn/fabric costs includes a breakdown into the various cost elements which allows for a better appreciation of the relative importance of these elements and their respective influence on the total costs. When reading the report, the objectives of the study - trace capital intensity in each segment - must constantly be borne in mind. It should also be noted that international competition takes place between a much wider array of producers working with the most modern and highly capital-intensive equipment of the type assumed in this study or depreciated old or second-hand machinery, leading to wide variations in manufacturing costs.

Attention is furthermore drawn to the fact that the cost pattern as emerging from this report reflects one element entering into the calculation of the final sales price for yarns and fabrics, others being overheads, incentive schemes, transport and insurance, import and export duties, etc. Moreover, competitiveness is determined increasingly by such factors as quality and style, reliability, promptness of delivery, flexibility, etc., which fall outside the scope of this study. An international comparison of this order can therefore never be more than an approximation to the real market situation. Finally, the changing nature of macro-economic factors (wage levels, inflation, interest and exchange rates, tariffs, etc.) renders it difficult to calculate production costs which are valid for a longer period. Hence, as no attempt is being made in this study to neutralize the effects of changes in the economic environment, the cost data presented are those valid at the beginning of the investment period, their validity for the later phases of the period being dependent on changes in macro-economic factors.

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Scope and Coverage

Geographically, the study covers Bangladesh, Brazil, China, Egypt, India, Indonesia, Italy, Korea Rep., Pakistan, Turkey, the USA and Vietnam. These countries all actively participate in international textile trade as exporters and/or importers.

**Geographical
Coverage**

Every year, the machinery manufacturers on whose equipment the present study is based are conducting numerous cost calculations for prospective clients around the world. Based on factors supplied by these clients, manufacturing costs are measured and used in the evaluation of investment projects. By using the same approach, ITMF's International Production Cost Comparison attempts to simulate reality within the limits outlined in the introduction. Cost factors for the participating countries are supplied by individual companies, consultants and textile trade associations. They are carefully reviewed by the six machinery manufacturers cooperating in the study and represent average cost factors for the country concerned. The results are presented in a way that enables the reader to see the repercussions on the costing structure of diverging factors (e.g. labour and capital costs).

Methodology

The product base in spinning is a Ne 30 (Nm 50 / 20 tex) combed yarn made of 100% cotton of 1-1/8" staple length and a Ne 20 (Nm 33 / 30 tex) carded yarn made of 100% cotton of 1-1/16" staple length. In texturing, it is a 100% polyester POY 75 f72 den textured yarn. The cotton yarns are woven into a "print cloth" fabric of 27.6/27.6 threads per cm (ring yarn) and a "print cloth" fabric of 24.0/24.0 threads per cm (rotor yarn), and a textured fabric of 38.0/31.0 threads per cm. Fabric dimensions are 168 cm grey width (cotton ring and rotor yarn), and 177 cm grey width (textured yarn). In knitting, the fabric constructions are of the Single Jersey type, 192 cm unfinished width (cotton ring) and of the Lapique type, 224 cm (cotton rotor) and of the Interlock type, 190 cm unfinished width (textured yarn), resp.

**Product
Coverage**

The cost calculations are based on the assumption that the cotton yarn is spun in a new mill equipped with 16'320 Rieter ring spindles and 1'380 Rieter open-end rotors producing 400 kg per hour while the textured yarn is produced on 10 Barmag eFK with an output of 800 metres per machine and minute, or 2'000 kg of yarn per day (95% machine efficiency). In weaving, 96 Picanol air-jet weaving machines OMNIplus Summum-2-P-190 produce 19.4 meters of fabric per machine and hour (94% machine efficiency), 72 Picanol air-jet weaving machines OMNIplus Summum-2-P-190 produce 22.3 meters of fabric per machine and hour (94% machine efficiency) while 60 Picanol rapier weaving machines OptiMax-4-R-190 have an output of 12 meters per machine and hour (95% machine efficiency). For knitting, Single Jersey (Lapique), 17 (13) circular knitting machines of Mayer & Cie, type Relanit 3.2 II, 30 inch diameter, gg 24, 96 feeders, with an output of 25.3 (31.4) kg per machine and hour (85% machine efficiency) are assumed, while for knitting Interlock, 8 circular knitting machines of Mayer & Cie, type OV 3.2 QC, 30 inch diameter, gg 28, 96 feeders, producing 10.7 kg per machine and hour (85% machine efficiency), are needed. In finishing, the process route for woven - continuous open width - is assumed to be composed of 1 singeing machine, 1 Benninger bleaching machine, 1 Benninger mercerizing machine, 1 Benninger hotflue, 1 Benninger PAD steam, 1 stenter frame, 1 sanforizing machine, 4 Maag inspection tables with a production of 69'120 meter per day. The process route for Knit - continuous open width (COW) is composed of 1 Santex slitter, 1 Benninger Trikoflex bleaching line, 1 stenter frame, 2 Benninger Küsters CPB stations, 1 Benninger Trikoflex washing line, 1 Santex Santashrink with Infeed stenter Relaxdryer, 2 Santex Santacompact Compactor, and 4

**Mill Type and
Size**

Maag inspection tables with a production of 15 tons a day. The process route for Knit - discontinuous (JET) entails hydrodynamical JET, 2 Santex slitter for Wet, 1 Santex Santashrink with Infeed stenter Relaxdryer, 2 Santex Santacompact Compactor, and 4 Maag inspection tables with a production of 16 tons a day (s. details below each cost factors table on p. 9-16).

Rates of output are assumed to be identical for all 12 countries concerned. The different efficiency standards prevailing in the countries have been taken into consideration by varying the number of workers required to obtain the output levels indicated.

**Efficiency
Standards**

The calculations are based on cost factors that prevailed in the 1st quarter of 2018. Cotton/polyester prices are those of the last week of February 2018.

**Reference
Period**

Exchange Rates

In view of rapidly changing currency relationships, especially in reference to the US dollar (USD), production cost factors are surveyed in domestic currencies, and converted to USD for ease of comparison. Average exchange rates for Q1/2018 were employed, as outlined below:

Vietnam	1 USD =	22676.21	Dong
U.S.A.	1 USD =	1.00	US Dollar
Bangladesh	1 USD =	82.72	Taka
Brazil	1 USD =	3.24	Real
China	1 USD =	6.36	Yuan Renminbi
Egypt	1 USD =	17.64	Egyptian Pound
India	1 USD =	64.27	Indian Rupees
Indonesia	1 USD =	13565.71	Indonesian Rupiah
Italy	1 USD =	0.81	Euro
Korea, Rep.	1 USD =	1071.14	Won
Pakistan	1 USD =	110.85	Pakistani Rupee
Turkey	1 USD =	3.81	Turkish New Lira

All values appearing in the tables detailing Cost Factors, Manufacturing Cost and Total Cost are expressed in USD.

Raw Material Costs 2018*

Bangladesh

Medium count cotton used in the production of 30-count 100% combed cotton yarn. Quotes for SM 1-1/8" in Cotton Outlook (Feb. 22, 2018) are weighted by proportions in Bangladesh imports; trade with Egypt, Sudan and other extra-fine cotton producers is excluded.

Price (fine) 1-1/8": USD 2.003 per kg

Price (medium) 1-1/16": USD 1.927 per kg

Brazil

Local market price for representative Brazilian Esalq index (basis 41-4) Real 2.79 per pound. Exchange rate: 1 USD = Real 3.2554 plus premium for SM 1-1/8" of 2 cents per pound.

Price (fine) 1-1/8": USD 1.932 per kg

Price (medium) 1-1/16": USD 1.855 per kg

China

China Cotton Index for representative Chinese style (T328) Yuan 15,689 per ton. Exchange rate: 1 USD = Yuan 6.35 plus premium for Superfine 1-1/8" of 1.75 cents per pound.

Price (fine) 1-1/8": USD 2.514 per kg

Price (medium) 1-1/16": USD 2.470 per kg

Egypt

Export price for representative Egyptian style Giza 86. Minus Discount for Superfine 1-1/8" of 5 cents per pound.

Price (fine) 1-1/8": USD 3.454 per kg

Price (medium) 1-1/16": USD 3.387 per kg

India

Bombay quotation for representative Indian style Shankar-6 Rupees 40,600 per candy. Exchange rate: 1 USD = Rupees 64.98 plus premium for Superfine 1-1/8" of 1.00 cents per pound.

Price (fine) 1-1/8": USD 1.779 per kg

Price (medium) 1-1/16": USD 1.702 per kg

Indonesia

Medium count cotton used in the production of 30-count 100% combed cotton yarn. Quotes for SM 1-1/8" in Cotton Outlook (Feb. 22, 2018) are weighted by proportions in Indonesian imports; trade with Egypt, Sudan and other extra-fine cotton producers is excluded.

Price (fine) 1-1/8": USD 2.034 per kg

Price (medium) 1-1/16": USD 1.957 per kg

Italy

Medium count cotton used in the production of 30-count 100% combed cotton yarn. Quotes for SM 1-1/8" in Cotton Outlook (Feb. 22, 2018) are weighted by proportions in Italian imports; trade with Egypt, Sudan and other extra-fine cotton producers is excluded.

Price (fine) 1-1/8": USD 1.992 per kg

Price (medium) 1-1/16": USD 1.915 per kg

Korea, Rep.

Medium count cotton used in the production of 30-count 100% combed cotton yarn. Quotes for SM 1-1/8" in Cotton Outlook (Feb. 22, 2018) are weighted by proportions in Korean imports; trade with Egypt, Sudan and other extra-fine cotton producers is excluded.

Price (fine) 1-1/8": USD 2.029 per kg

Price (medium) 1-1/16": USD 1.952 per kg

Pakistan

KCA's official spot rate for Grade III, 1-1/16" staple Rs. 6,900 per maund, ex-gin (plus premium for Extra 1-1/8" of 3.00 cents per pound).

Price (fine) 1-1/8": USD 1.753 per kg

Price (medium) 1-1/16": USD 1.668 per kg

Turkey

Izmir quotation for representative Turkish style (Izmir. Standard 1 white) YTL 7.30 per kg (plus premium for Extra 1-1/8" of 2.00 cents per pound).

Price (fine) 1-1/8": USD 1.975 per kg

Price (medium) 1-1/16": USD 1.920 per kg

U.S.A.

7-region SLM 1-1/16" average of 76.53 cents per pound plus premium for SM 1-1/8" of 3.5 cents per pound = 80.03 cents per pound (Source: ICAC and Cotton Outlook).

Price (fine) 1-1/8": USD 1.764 per kg

Price (medium) 1-1/16": USD 1.686 per kg

Vietnam

Medium count cotton used in the production of 30-count 100% combed cotton yarn. Quotes for SM 1-1/8" in Cotton Outlook (Feb. 22, 2018) are weighted by proportions in Vietnamese imports; trade with Egypt, Sudan and other extra-fine cotton producers is excluded.

Price (fine) 1-1/8": USD 2.023 per kg

Price (medium) 1-1/16": USD 1.946 per kg

Sources: Cotton Outlook and ICAC

*All quotations refer to the last week of February 2018.

Definition of Cost Factors

Manufacturing costs relate to the production area only, i.e. excluding overheads.

Reference Area

Wages include social charges, fringe benefits and shift work premiums. Note that the study is based on expenditure in the production area only and therefore excludes overheads (management, accounting, sales). Since, from experience, this cost factor differs widely from one company to the other, its impact on the total costing structure may clearly be considerable.

Wages

The number of operatives required are determined by work-study methods. The individual times are according to Benninger, Mayer, Oerlikon Barmag, Picanol, Rieter and Santex Rimar standards. Supervisors, as well as staff for laboratories, workshops, despatch, etc. are not included.

**Operating
Personnel**

The requirements of skilled and unskilled workers for machine maintenance are determined according to Benninger, Mayer, Oerlikon Barmag, Picanol, Rieter and Santex Rimar standards for the overhaul and maintenance of their machines. The values indicated give the requirements per shift, similar to those for operatives.

**Overhauling
and
Maintenance
Personnel**

The necessary average floor space for machines, gangways and reserve (can space etc.) was evaluated on the basis of a great number of spinning, texturing, weaving, knitting and finishing mill layouts. Certain alterations may arise, according to specific machinery layouts.

Floor Space

The cost of the buildings refers to the production area only and includes the costs of the air conditioning ducts for supply and recycled air, the lighting system, the installations for high and low voltage electricity supply, fire protection, etc. The dimension of the air conditioning installation is in direct relation to the specific climatic conditions in the respective countries.

Building Costs

The straight-line method (as against the degressive method) was used to calculate depreciation costs which are based on the period most commonly applied in the countries concerned (as against those provided for in tax laws). Where depreciation rates differ from those assumed, the company-specific depreciation costs may be recalculated using the formula in the Annex (p. 43).

Depreciation

Interest rates vary not only from country to country but also from company to company within one single country. In this study the average interest rates that prevailed in the first quarter of the reference year were assumed.

Interest Rates

Cost Factors 2018: Spinning

Product	Unit	Bangladesh	Brazil	China	Egypt	India	Indonesia	Italy	Korea, Rep.	Pakistan	Turkey	U.S.A. ⁽⁶⁾	Vietnam
Hourly wage for skilled personnel	USD	0,79	5,55	3,77	0,82	1,23	2,68	27,52	19,48	0,7	6,34	19 ⁽⁷⁾⁽⁸⁾	1,97
Hourly wage for machine tenders	USD	0,48	2,77	2,67	0,68	0,87	1,33	25,31	12,88	0,7	4,36	15,5 ⁽⁸⁾	1,44
Hourly wage for unskilled personnel	USD	0,28	2,31	2,2	0,4	0,75	1,06	20,64	11,11	0,6	3,65	13 ⁽⁸⁾	1,06
Operating hours (per year)	Hour	8'549	8'200	8'400	7'700	8'400	8'600	5'520	8'500	8'640	8'520	7'800	8'160
Cost of electric power (per kWh)	USD	0,1	0,11	0,13 ⁽¹⁾	0,05	0,13	0,09	0,16	0,11	0,09	0,08	0,05 ⁽⁹⁾	0,06
Cost of buildings (per m2)	USD	178,43	321,08	216,22	85,04	178,94	159,23	539,28	690,85	160	531,17	700	149,94
Annual building maintenance (% of building cost)	%	1	1	1	1	1	1	1	1	1	1	1	1
Depreciation period for machinery	Year	9	10	9	12	10	12	6	8	10	10	7 ⁽¹²⁾	15
Depreciation period for accessories	Year	5	8	6,5	5	5	5	5	5	15	10	5	5
Depreciation period for buildings	Year	29	20	20	39	29	20	30	30	10	50	39	39
Customs, import tax, etc. (% of machinery price)	%	1	12,1	10 ⁽²⁾	14 ⁽⁴⁾	5	5	0	5	0	0	3	0
Capital interest rate (%)	%	10	11	6,1 ⁽³⁾	10	8	10	1,8	3,5	7	7	5,5 ⁽¹³⁾	7
Raw material cost (per kg of cotton 1-1/8", ring)	USD	2,003	1,932	2,514	3,454	1,779	2,034	1,992	2,029	1,753	1,975	1,764	2,023
Raw material cost (per kg of cotton 1-1/16", rotor)	USD	1,927	1,855	2,47	3,387	1,702	1,957	1,915	1,952	1,688	1,92	1,686	1,946

(Notes: See page 17)

Type: 16'320 Rieter ring spindles
(incl. winding)

Yarn Data

Raw material: 100% cotton
Staple length: 1-1/8 inches
Yarn count: Ne 30 combed

Rate of Output: 400 kg per hour

Type: 1'380 Rieter open-end rotors

Yarn Data

Raw material: 100% cotton
Staple length: 1-1/16 inches
Yarn count: Ne 20 carded

Rate of Output: 400 kg per hour

Cost Factors 2018: Texturing

Product	Unit	Bangladesh	Brazil	China	Egypt	India	Indonesia	Italy	Korea, Rep.	Pakistan	Turkey	U.S.A. ⁽⁶⁾	Vietnam
Hourly wage for skilled personnel	USD	1	4,7	4,3	1	1,2	2,6	28	18,5	1,1	5,3	18,5 ⁽⁷⁾⁽⁸⁾	1,6
Hourly wage for machine tenders	USD	0,8	3,5	3,7	0,8	0,83	1,3	23	12,8	1	3,7	15 ⁽⁸⁾	1,19
Hourly wage for unskilled personnel	USD	0,7	2,3	2,3	0,6	0,71	1,03	20	11	0,85	3,1	13 ⁽⁸⁾	1
Operating hours (per year)	Hour	8'400	8'200	7'400	7'700	8'400	8'300	8'000	7'400	8'400	7'800	8'300	8'400
Cost of electric power (per kWh)	USD	0,09	0,07	0,08 ⁽¹⁾	0,05	0,08	0,09	0,13	0,11	0,08	0,08	0,06 ⁽⁹⁾	0,07
Cost of buildings (per m2)	USD	180	390	300	240	170	180	900	700	170	300	700	140
Annual building maintenance (% of building cost)	%	1	1	1	1	1	1	1	1	1	1	1	1
Depreciation period for machinery	Year	10	10	10	12	10	12	8	8	10	10	5 ⁽¹²⁾	15
Depreciation period for accessories	Year	6	8	8	5	6	5	5	8	5	7	5	10
Depreciation period for buildings	Year	30	20	20	30	28	20	30	32	20	30	39	40
Customs, import tax, etc. (% of machinery price)	%	8	13	17 ⁽²⁾	5 ⁽⁴⁾	13	5	0	7	9	5	3	0
Capital interest rate (%)	%	9	11	6 ⁽³⁾	10	8	10	3	3,5	8	7	5,5 ⁽¹³⁾	8
Polyester POY 75 den (per kg)	USD	1,22	1,2	1,12	1,28	1,2	1,17	1,3	1,25	1,21	1,35	1,35 ⁽¹⁴⁾	1,28

(Notes: See page 17)

Size of Mill: 10 Barmag eFK, 240 positions

Yarn Data

Raw material:

100% polyester POY

Yarn count:

75 den textured (India: 85 den)

Rate of Output: 800 m of yarn per machine and minute/2,000 kg per day (95% machine efficiency)

Cost Factors 2018: Weaving

Product	Unit	Bangladesh	Brazil	China	Egypt	India	Indonesia	Italy	Korea, Rep.	Pakistan	Turkey	U.S.A. ⁽⁶⁾	Vietnam
Hourly wage for skilled personnel	USD	0,91	6,29	3,93	0,82	1,17	2,41	32,55	25,21	0,99	5,83	20,25 ⁽⁷⁾⁽⁸⁾	1,94
Hourly wage for machine tenders	USD	0,73	3,35	3,62	0,54	0,78	1,33	25,46	13,07	0,9	3,86	17,35 ⁽⁸⁾	1,54
Hourly wage for unskilled personnel	USD	0,6	2,14	2,2	0,51	0,65	0,88	20,93	11,2	0,79	2,57	12,85 ⁽⁸⁾	0,88
Operating hours (per year)	Hour	8'400	7'260	8'400	7'700	7'700	8'600	6'160	8'000	8'688	7'800	7'488	8'280
Cost of electric power (per kWh)	USD	0,1	0,11	0,13 ⁽¹⁾	0,05	0,13	0,09	0,13	0,11	0,086	0,08	0,05 ⁽⁹⁾	0,06
Cost of steam (per kg of yarn)	USD	0,04	0,08	0,2	0,01	0,17	0,01	0,35	0,45	0,01	0,28	0,02	0,14
Sizing cost (per kg of yarn)	USD	0,09	0,09	0,33	0,34	0,34	0,03	0,2	0,78	0,1	0,35	0,24	0,03
Cost of buildings (per m2)	USD	159,74	385,32	298,78	113,39	163,38	159,23	1'200	746,87	160	162,67	1'000	154,35
Annual building maintenance (% of building cost)	%	1	1	1	1	1	1	1	1	1	1	1	1
Depreciation period for machinery	Year	10	10	10	12	12	12	12	10	12	10	7 ⁽¹²⁾	15
Depreciation period for accessories	Year	5	10	5	5	5	5	5	5	12	6	5	5
Depreciation period for buildings	Year	20	20	20	30	30	20	33	32	12	39	39	25
Customs, import tax, etc. (% of machinery price)	%	2	16,7	2 ⁽²⁾	5 ⁽⁴⁾	0	5	0	3	0	3,7	3,7	1
Capital interest rate (%)	%	10	11	6 ⁽³⁾	1	8	1	3	4	7	7	6 ⁽¹³⁾	7
Raw material cost (per meter of woven fabric, Cotton 1-1/8")	USD	0,38	0,36	0,47	0,65	0,33	0,38	0,37	0,38	0,33	0,37	0,33	0,38
Raw material cost (per meter of woven fabric, Cotton 1-1/16")	USD	0,47	0,46	0,61	0,83	0,42	0,48	0,47	0,48	0,41	0,47	0,41	0,48
Raw material cost (per meter of woven fabric, Polyester POY)	USD	0,12	0,12	0,11	0,13	0,12	0,12	0,13	0,13	0,12	0,14	0,14 ⁽¹⁴⁾	0,13

(Notes: See page 17)

Print Cloth (ring yarn)

Size of Mill:	96 Picanol airjet weaving machines, OMNIplus Summum-2-P-190, air conditioning, weaving preparation, cloth inspection, transportation units, warp beam diameter 1100 mm, big batch winders 1000 mm	Fabric Data	Cloth type: print cloth Construction: 27.6/27.6 threads/cm Yarn type: 100% cotton Yarn count: Ne 30 warp & weft Grey width: 168 cm Grey weight: 190 g/m
Rate of Output:	19.4 meters of fabric per machine and hour (94% machine efficiency)		

Print Cloth (rotor yarn)

Size of Mill:	72 Picanol airjet weaving machines, OMNIplus Summum-2-P-190, air conditioning, weaving preparation, cloth inspection, transportation units, warp beam diameter 1100 mm, big batch winders 1000 mm	Fabric Data	Cloth type: print cloth Construction: 24.0/24.0 threads/cm Yarn type: 100% cotton Yarn count: Ne 20 warp & weft Grey width: 168 cm Grey weight: 248 g/m
Rate of Output:	22.3 meters of fabric per machine and hour (94% machine efficiency)		

Print Cloth (textured yarn)

Size of Mill:	60 Picanol rapier weaving machines, OptiMax-i-4-R-190, air conditioning, weaving preparation, cloth inspection, transportation units, warp beam diameter 1000 mm, cloth beam diameter 600 mm	Fabric Data	Cloth type: textured fabric Construction: 38.0/31.0 threads/cm Yarn type: PES filament/textured Yarn count: 75 den warp & weft Grey width: 177 cm Grey weight: 106 g/m
Rate of Output:	12.0 meters of fabric per machine and hour (95% machine efficiency)		

Cost Factors 2018: Knitting

Product	Unit	Bangladesh	Brazil	China	Egypt	India	Indonesia	Italy	Korea, Rep.	Pakistan	Turkey	U.S.A. ⁽⁶⁾	Vietnam
Hourly wage for skilled personnel	USD	0,82	5,97	4,09	1,19	1	2,51	28,81	26,52	1,05	4,26	18,3 ⁽⁷⁾⁽⁸⁾	1,59
Hourly wage for machine tenders	USD	0,72	3,07	3,07	0,79	0,82	1,59	27,62	10,32	0,68	2,73	15,7 ⁽⁸⁾	1,7
Hourly wage for unskilled personnel	USD	0,61	2,1	2,52	0,74	0,75	1,25	26,29	8,82	0,6	2,07	12,2 ⁽⁸⁾	1,06
Operating hours (per year)	Hour	8'565	6'500	8'200	5'400	8'400	8'600	4'000	6'257	7'310	8'100	7'800	7'320
Cost of electric power (per kWh)	USD	0,1	0,11	0,13 ⁽¹⁾	0,05	0,13	0,09	0,16	0,11	0,86	0,08	0,05 ⁽⁹⁾	0,06
Cost of buildings (per m2)	USD	153	347	267	170	178	159	1'412	728	49	151	700	127
Annual building maintenance (% of building cost)	%	1	1	1	1	1	1	1	1	1	1	1	1
Depreciation period for machinery	Year	10	10	10	8	10	12	8	7	5	10	7 ⁽¹²⁾	15
Depreciation period for buildings	Year	29	20	20	30	29	20	30	32	10	39	39	35
Customs, import tax, etc. (% of machinery price)	%	0	19	23 ⁽²⁾	5 ⁽⁴⁾	12,75	5	0	0	5	0	0	0
Capital interest rate (%)	%	10	11	6 ⁽³⁾	10	8	10	2	4	7	7	6 ⁽¹³⁾	7
Ring yarn (Single Jersey, per meter of knitted fabric)	USD	0,46	0,44	0,57	0,79	0,40	0,47	0,46	0,47	0,40	0,45	0,40	0,46
Rotor yarn (Lapique, per meter of knitted fabric)	USD	0,69	0,66	0,88	1,21	0,61	0,70	0,68	0,70	0,60	0,69	0,60	0,70
Textured yarn (Interlock, per meter of knitted fabric)	USD	0,25	0,25	0,23	0,27	0,25	0,24	0,27	0,26	0,25	0,28	0,28 ⁽¹⁴⁾	0,26

(Notes: See page 17)

Single Jersey (ring yarn)

Size of Mill: 17 Mayer & Cie Relanit 3.2 II circular, knitting machines, 30 inch diameter, 24 gg, 96 feeders, with side creel

Rate of Output: 25.3 kg (or 110m = 25.3kg / 230g/m) per machine and hour (85% production efficiency)

Fabric Data

Construction: Single Jersey
Yarn type: 100% cotton
Yarn count: Ne 30
Grey width (open): 192 cm
Grey weight: 230 g/m

Lapique (rotor yarn)

Size of Mill:	13 Mayer & Cie Relanit 3.2 II circular, knitting machines, 30 inch diameter, 24 gg, 96 feeders, with side creel	Fabric Data	Construction:	Lapique
			Yarn type:	100% cotton
			Yarn count:	Ne 20
			Grey width (open):	224 cm
			Grey weight:	358 g/m
Rate of Output:	31.4 kg (or 87.7m = 31.4kg / 358g/m) per machine and hour (85% production efficiency)			

Interlock (textured yarn)

Size of Mill:	8 Mayer & Cie OV 3.2 QC circular, knitting machines, 30 inch diameter, 28 gg, with side creel	Fabric Data	Construction:	Interlock
			Yarn type:	100% PES
			Yarn count:	75 den / 72 f
			Grey width (open):	190 cm
			Grey weight:	209 g/m
Rate of Output:	10.7 kg (or 51.2m = 10.7kg / 209g/m) per machine and hour (85% production efficiency)			

Cost Factors 2018: Finishing

Product	Unit	Bangladesh	Brazil	China	Egypt	India	Indonesia	Italy	Korea, Rep.	Pakistan	Turkey	U.S.A.	Vietnam
Hourly wage for skilled personnel	USD	0,91	8,44	5,54	1,46	1,22	2,67	27,46	19,13	2,25	5,4	19	1,94
Hourly wage for machine tenders	USD	0,73	3,31	3,85	1,22	0,87	1,33	25,25	12,88	1,08	3,7	15,5	1,54
Hourly wage for unskilled personnel	USD	0,60	2,35	3,01	0,82	0,74	1,06	20,68	11,11	0,65	3,1	13	0,88
Operating hours (per year)	Hour	8'541	8'120	8'040	7'700	8'568	8'592	7'008	8'272	8'400	7'306	7'488	8'000
Cost of electric power (per kWh)	USD	0,10	0,11	0,13 ⁽¹⁾	0,05	0,12	0,09	0,15	0,11	0,07	0,07	0,05	0,06
Cost of fresh water (per m3)	USD	0,14	0,39	0,40	0,26	0,26	0,12	0,35	0,45	0,162	0,35	0,87	0,44
Cost of water (inclusive waste water treatment, per m3)	USD	0,50	1,11	1,34	0,66	0,84	0,47	2,2	1,78	0,51	1,3	2,35	0,94
Cost of steam (per ton)	USD	14	25,55	22,78	14	18,94	14	25	22,58	21,2	23,61	23	12,06
Cost of natural gas (per Nm3)	USD	0,15	0,32	0,15	0,18	0,18	0,18	0,296	0,18	0,18	0,18	0,2	0,18
Cost of buildings (per m2)	USD	180	337	314	300	178	200	939	742	242	531	700	150
Annual building maintenance (% of building cost)	%	1	1	1	1	1	1	1	1	1	1	1	1
Depreciation period for machinery	Year	10	10	10	11	10	12	8	8	10	8	7	15
Depreciation period for buildings	Year	29	20	20	39	29	20	30	30	15	40	39	39
Customs, import tax, etc. (% of machinery price)	%	2	3,75	8,4 ⁽²⁾	12,7 ⁽⁴⁾	5	5	0	5	10	2,2	3	0
Capital interest rate (%)	%	10	11	6,1 ⁽³⁾	10	8	10	1,8	3,5	7	7	5,5	7
Raw material cost (per meter of finished woven fabric)	USD	0,38	0,36	0,48	0,65	0,34	0,39	0,38	0,38	0,33	0,37	0,33	0,38
Raw material cost (per kg of finished knitted fabric)	USD	2,00	1,93	2,51	3,45	1,78	2,03	1,99	2,03	1,75	1,98	1,76	2,02

(Notes: See page 17)

Woven - Continuous Open Width

Size of Mill:	1 Singeing Machine 60 m/min	Fabric Data	Construction:	27.6/27.6 threads/cm
	1 BENNINGER Bleaching machine 60 m/min		Yarn type:	100% cotton
	1 BENNINGER Mercerizing machine 60 m/min		Yarn count:	Ne 30
	1 BENNINGER Hotflue 60 m/min		Grey g/m2:	113
	1 BENNINGER PAD STEAM 60 m/min		Speed:	60 m/min
	1 Stenter Frame 60 m/min		Shade depth:	3.5%
	1 Sanforizing machine 60 m/min		Dyestuff:	Reactive
	4 Maag Inspection tables		Grey width:	168 cm
	All working width 1800 mm		Grey weight:	190 g/m
Rate of Output:	Production (69'120 m/d)			

Knit - Continuous Open Width (COW)

Size of Mill:	1 Santex Slitter	Fabric Data	Construction:	Single Jersey
	1 BENNINGER TRIKOFLEX Bleaching line 15 ton/d		Yarn type:	100% cotton
	1 Stenter frame 15 ton/d		Yarn count:	Ne 30
	2 BENNINGER Küsters CPB Station each 10 ton/d		Grey g/m2:	137
	1 BENNINGER TRIKOFLEX washing line 15 ton/d		Speed per Set:	57 m/min
	1 Santex Santashrink with Infeed stenter Relaxdryer 15 ton/d		Shade depth:	3.5%
	2 Santex Santacompact Compactor each 10 ton/d		Dyestuff:	Reactive
	4 Maag Inspection tables		Grey width:	192 cm
	All working width 2200 mm		Grey weight:	230 g/m
Rate of Output:	Production (15 ton/d)			

Knit - Discontinuous (JET)

Size of Mill:	Hydrodynamical JET's for 15 ton/d	Fabric Data	Construction:	Single Jersey
	2 Santex slitter for Wet		Yarn type:	100% cotton
	1 Santex Santashrink with Infeed stenter Relaxdryer 15 ton/d		Yarn count:	Ne 30
	2 Santex Santacompact Compactor each 10 ton/d		Grey g/m2:	137
	4 Maag Inspection tables		Speed per Set:	57 m/min respect. 15 ton/d for Jets
	All working width 2200 mm		Shade depth:	3.5%
			Dyestuff:	Reactive
			Grey width:	192 cm
	Grey weight:	230 g/m		
Rate of Output:	Production (15 ton/d)			

Notes

- 1 Average for Provinces Jiangsu, Zhejiang and Fujian
- 2 Only VAT of 17% (local) + import duty
- 3 1-3 years long – term benchmark interest rate for loans. Interest rate for state-owned enterprises.
- 4 Country of origin = EU
- 5 85 den
- 6 Based on conditions in south-eastern United States
- 7 Rate for loom technician
- 8 Includes 25% fringe benefits
- 9 Average rate for industrial user in South Carolina for 12 month ending 12/31/15
- 10 Combined cost of water, fire protection and sewage (waste water treatment (per m3). For industrial user in Greenville County, S.C.
- 11 Rate for industrial user in Greenville County, S.C.
- 12 Recovery period (in years) GDS (MACRS)
- 13 Defined as prime plus 1%. Current as of March 2018. Prime rate effective of 3.5% since Dec 16, 2008
- 14 115 den POY feed yarn drawn down to 70 den finished yarn

Definition of Cost Elements

In spinning, revenue from the sale of waste (waste from slivers, filters, flats and grid droppings, etc.) is considered when calculating waste costs. In knitting, absence of waste is assumed. In finishing, the waste in Woven - Continuous Open Width entails weight loss in sizing and singeing, filters and other impurities. The waste in Knit - Continuous Open Width (COW) and Knit Discontinuous (JET) refers to other impurities.

Waste

Wage costs are calculated on the basis of the wages paid to operatives and to skilled and unskilled labour for maintenance work. All social charges and shift-work premiums are included. For reserve personnel a percentage figure is added.

Labour

Energy costs include the costs relating to the actual power consumption of the machines, the illumination and the air conditioning (in weaving and finishing, also steam, gaz, and heating). It is assumed that the mill is lit for the entire production time.

Power

The costs for spare parts, lubricants, cleaning materials and maintenance work on the buildings represent the costs for auxiliary material (this includes preparation costs in weaving and dyestuff and chemicals in finishing).

Auxiliary Material

This element includes depreciation of machines, accessories and buildings. Machinery costs include free delivery to the mill, erection and - where applicable - customs duty and taxes.

Depreciation

Costs of capital interest.

Interest

The sum of the above group of costs represents the total manufacturing costs.

Total Manuf. Costs

Cost of raw cotton/polyester in the finished product in USD per kg or meter.

Raw Material

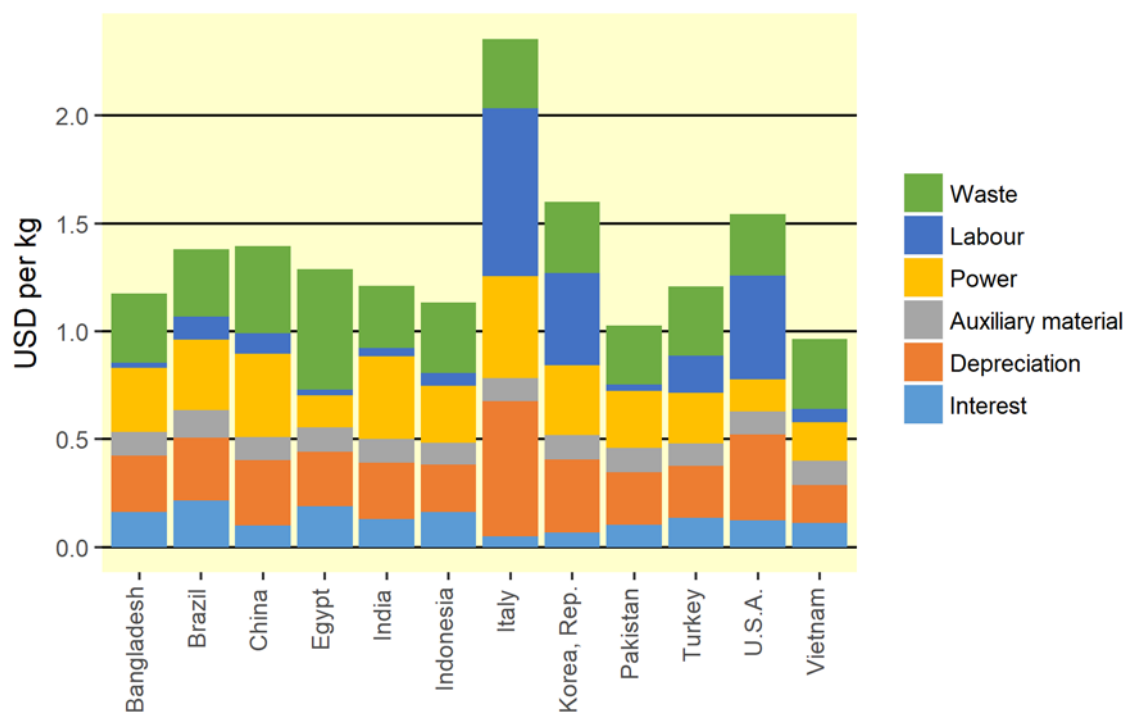
The "Total Costs" table present the sum of production costs across segments plus the cost of raw material (i.e. the cost of fibre reported as Cost Factors, expressed in USD per m or USD per kg depending on the unit of reference). Hence, the labour cost presented in the table "Total Cost 2018: Spinning Ring/NE30" equals the labour cost reported in the table "Manufacturing Cost 2018: Spinning Ring/NE30" only (because this is the first step in the value chain). The labour cost presented at each following step of the value chain (weaving/knitting and finishing) comprises the labour cost of the previous segments (i.e. cumulative costs over segments). Thus, the cost of labour in the table "Total Cost 2018: Weaving Ring Yarn Fabric" equals the labour cost reported in table "Manufacturing Cost 2018: Weaving Ring Yarn Fabric" plus the labour cost reported in the table "Total Cost 2018: Spinning Ring/NE30" expressed in the corresponding unit (i.e. USD per meter). The cost of labour in the table "Total Cost 2018: Finishing - Woven - Continuous Open Width" equals the labour cost reported in the table "Manufacturing Cost 2018: Finishing - Woven - Continuous Open Width" plus the labour cost reported in the table "Total Cost 2018: Weaving Ring Yarn Fabric". This is true for each process route and costs are transformed into the matching units (i.e. USD per m or USD per kg, depending on the segment).

Total Costs

Manufacturing Cost 2018: Spinning Ring/NE30

Product	Unit	Bangladesh	Brazil	China	Egypt	India	Indonesia	Italy	Korea, Rep.	Pakistan	Turkey	U.S.A.	Vietnam
Waste	USD per kg % of Total	0.32 27%	0.31 23%	0.40 29%	0.56 43%	0.29 24%	0.33 29%	0.32 14%	0.33 20%	0.27 27%	0.32 27%	0.28 18%	0.32 34%
Labour	USD per kg % of Total	0.02 2%	0.11 8%	0.09 7%	0.03 2%	0.04 3%	0.06 5%	0.78 33%	0.43 27%	0.03 3%	0.17 14%	0.48 31%	0.06 7%
Power	USD per kg % of Total	0.30 25%	0.33 24%	0.38 28%	0.15 11%	0.38 32%	0.27 23%	0.47 20%	0.33 20%	0.27 26%	0.24 20%	0.15 10%	0.18 18%
Auxiliary material	USD per kg % of Total	0.11 9%	0.13 9%	0.11 8%	0.11 9%	0.11 9%	0.10 9%	0.11 5%	0.11 7%	0.11 11%	0.10 8%	0.11 7%	0.11 12%
Depreciation	USD per kg % of Total	0.26 22%	0.29 21%	0.30 22%	0.26 20%	0.26 21%	0.22 19%	0.63 27%	0.34 21%	0.24 24%	0.24 20%	0.40 26%	0.17 18%
Interest	USD per kg % of Total	0.16 14%	0.21 16%	0.10 7%	0.19 15%	0.13 11%	0.16 14%	0.05 2%	0.07 4%	0.10 10%	0.14 11%	0.12 8%	0.11 12%
Total	USD per kg % of Total	1.18 100%	1.38 100%	1.40 100%	1.29 100%	1.21 100%	1.14 100%	2.35 100%	1.60 100%	1.03 100%	1.21 100%	1.54 100%	0.96 100%
Index: Italy		50	59	59	55	51	48	100	68	44	51	66	41

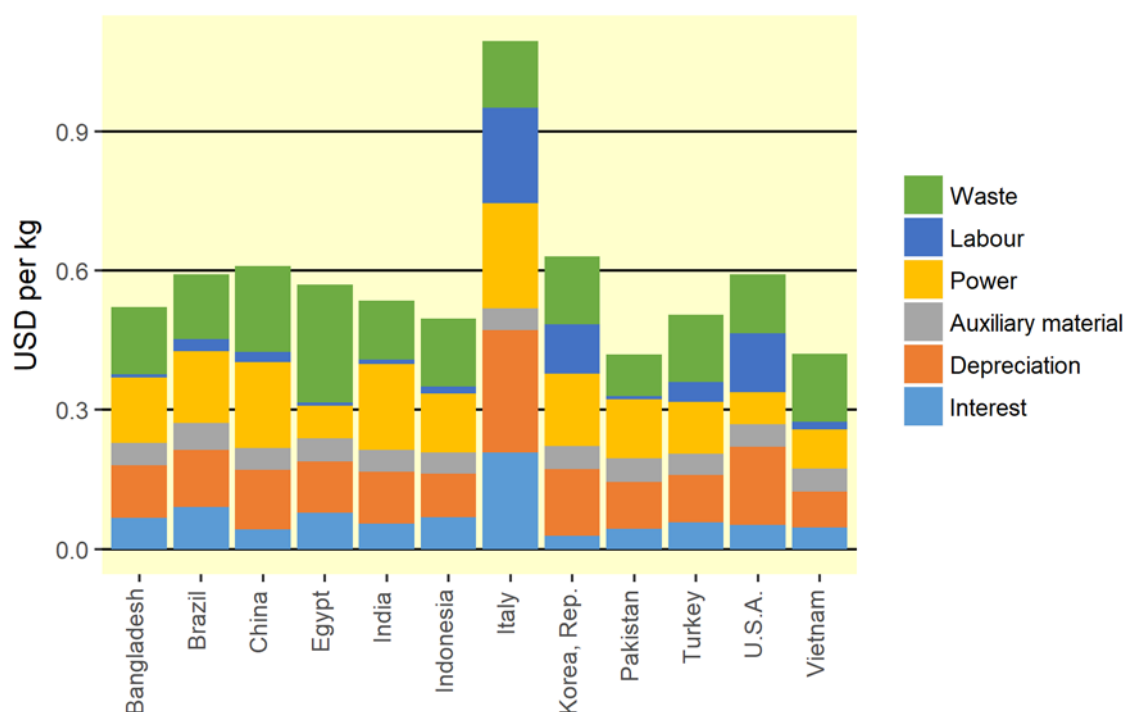
Manufacturing Cost 2018: Spinning Ring/NE30



Manufacturing Cost 2018: Spinning Rotor/NE20

Product	Unit	Bangladesh	Brazil	China	Egypt	India	Indonesia	Italy	Korea, Rep.	Pakistan	Turkey	U.S.A.	Vietnam
Waste	USD per kg % of Total	0.14 28%	0.14 24%	0.18 30%	0.25 45%	0.13 24%	0.15 30%	0.14 13%	0.15 23%	0.09 21%	0.14 29%	0.13 21%	0.15 35%
Labour	USD per kg % of Total	0.01 1%	0.03 4%	0.02 4%	0.01 1%	0.01 2%	0.01 3%	0.20 19%	0.11 17%	0.01 2%	0.04 9%	0.13 21%	0.02 4%
Power	USD per kg % of Total	0.14 27%	0.15 26%	0.18 30%	0.07 12%	0.18 34%	0.13 26%	0.23 21%	0.15 25%	0.13 30%	0.11 22%	0.07 12%	0.08 20%
Auxiliary material	USD per kg % of Total	0.05 9%	0.06 10%	0.05 8%	0.05 9%	0.05 9%	0.05 9%	0.05 4%	0.05 8%	0.05 12%	0.05 9%	0.05 8%	0.05 12%
Depreciation	USD per kg % of Total	0.11 22%	0.12 21%	0.13 21%	0.11 19%	0.11 21%	0.09 19%	0.26 24%	0.14 23%	0.10 24%	0.10 20%	0.17 28%	0.08 18%
Interest	USD per kg % of Total	0.07 13%	0.09 15%	0.04 7%	0.08 14%	0.06 10%	0.07 14%	0.21 19%	0.03 4%	0.04 11%	0.06 12%	0.05 9%	0.05 11%
Total	USD per kg % of Total	0.52 100%	0.59 100%	0.61 100%	0.57 100%	0.54 100%	0.50 100%	1.09 100%	0.63 100%	0.42 100%	0.50 100%	0.59 100%	0.42 100%
Index: Italy		48	54	56	52	49	45	100	58	38	46	54	38

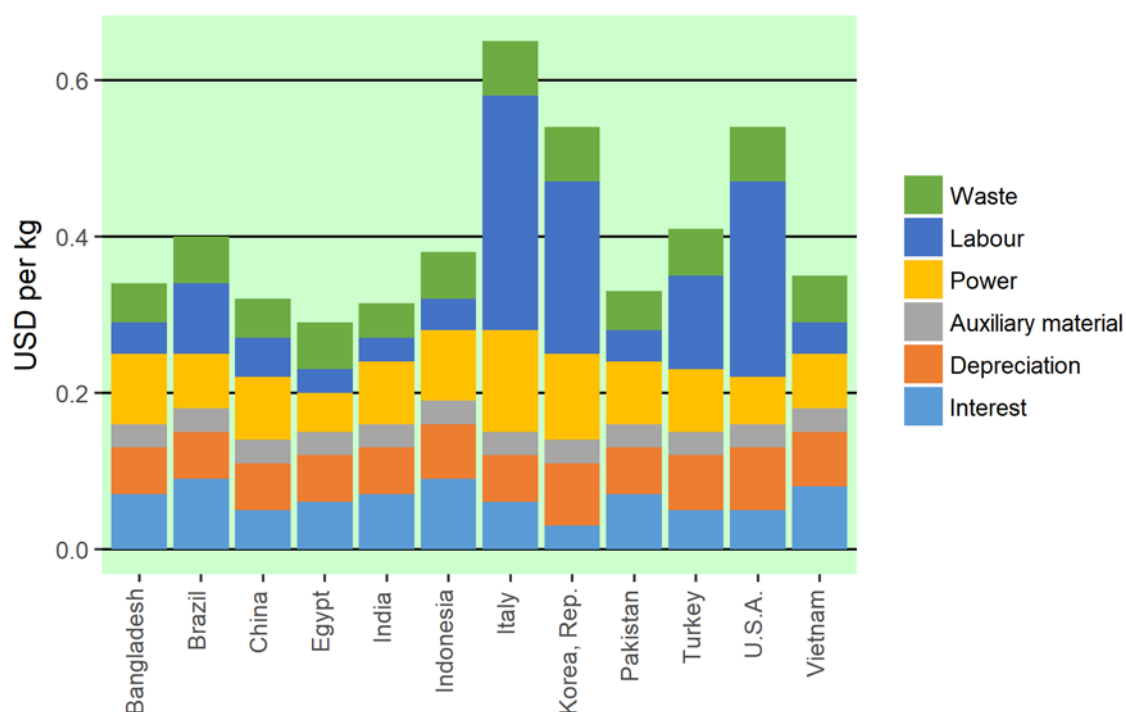
Manufacturing Cost 2018: Spinning Rotor/NE20



Manufacturing Cost 2018: Texturing (75den/72F)

Product	Unit	Bangladesh	Brazil	China	Egypt	India	Indonesia	Italy	Korea, Rep.	Pakistan	Turkey	U.S.A.	Vietnam
Waste	USD per kg	0.05	0.06	0.05	0.06	0.04	0.06	0.07	0.07	0.05	0.06	0.07	0.06
	% of Total	15%	15%	16%	21%	14%	16%	11%	13%	15%	15%	13%	17%
Labour	USD per kg	0.04	0.09	0.05	0.03	0.03	0.04	0.30	0.22	0.04	0.12	0.25	0.04
	% of Total	12%	22%	16%	10%	10%	11%	46%	41%	12%	29%	46%	11%
Power	USD per kg	0.09	0.07	0.08	0.05	0.08	0.09	0.13	0.11	0.08	0.08	0.06	0.07
	% of Total	26%	18%	25%	17%	25%	24%	20%	20%	24%	20%	11%	20%
Auxiliary material	USD per kg	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
	% of Total	9%	8%	9%	10%	10%	8%	5%	6%	9%	7%	6%	9%
Depreciation	USD per kg	0.06	0.06	0.06	0.06	0.06	0.07	0.06	0.08	0.06	0.07	0.08	0.07
	% of Total	18%	15%	19%	21%	19%	18%	9%	15%	18%	17%	15%	20%
Interest	USD per kg	0.07	0.09	0.05	0.06	0.07	0.09	0.06	0.03	0.07	0.05	0.05	0.08
	% of Total	21%	22%	16%	21%	22%	24%	9%	6%	21%	12%	9%	23%
Total	USD per kg	0.34	0.40	0.32	0.29	0.32	0.38	0.65	0.54	0.33	0.41	0.54	0.35
	% of Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Index: Italy		52	62	49	45	48	58	100	83	51	63	83	54

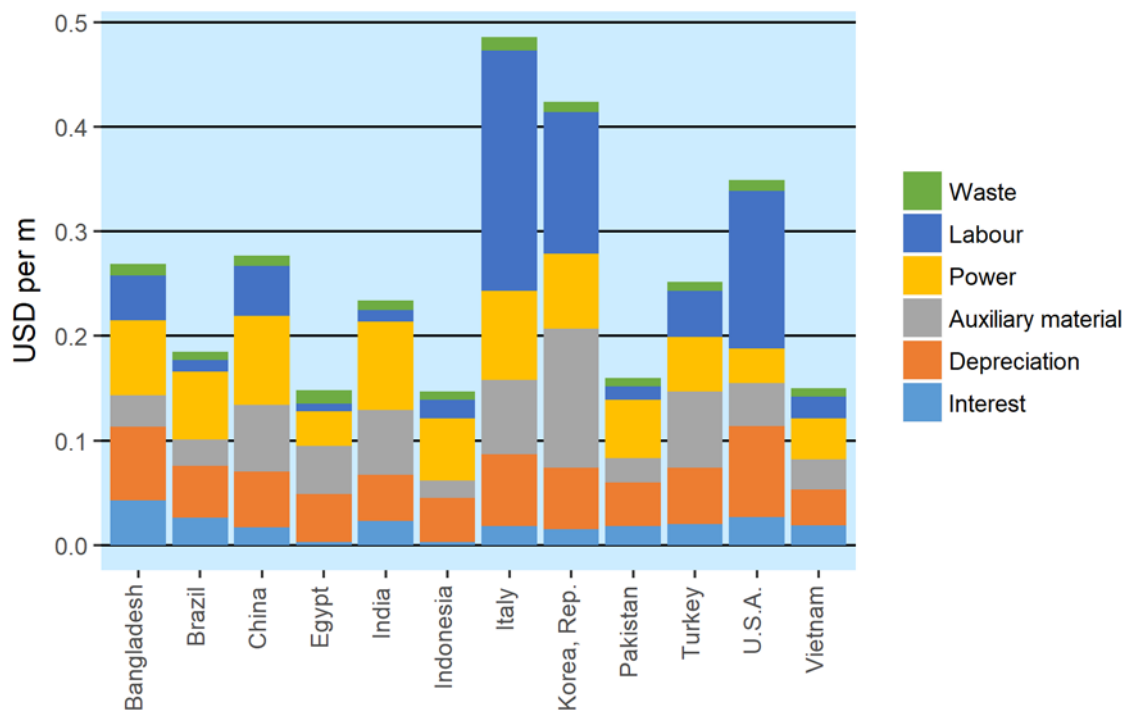
Manufacturing Cost 2018: Texturing (75den/72F)



Manufacturing Cost 2018: Weaving Ring Yarn Fabric

Product	Unit	Bangladesh	Brazil	China	Egypt	India	Indonesia	Italy	Korea, Rep.	Pakistan	Turkey	U.S.A.	Vietnam
Waste	USD per m % of Total	0.011 4%	0.008 4%	0.010 4%	0.013 9%	0.009 4%	0.008 5%	0.013 3%	0.010 2%	0.008 5%	0.009 4%	0.010 3%	0.008 5%
Labour	USD per m % of Total	0.043 16%	0.011 6%	0.048 17%	0.007 5%	0.011 5%	0.018 12%	0.230 47%	0.135 32%	0.013 8%	0.044 17%	0.151 43%	0.021 14%
Power	USD per m % of Total	0.072 27%	0.065 35%	0.085 31%	0.033 22%	0.085 36%	0.059 40%	0.085 17%	0.072 17%	0.056 35%	0.052 21%	0.033 9%	0.039 26%
Auxiliary material	USD per m % of Total	0.030 11%	0.025 14%	0.064 23%	0.046 31%	0.062 26%	0.017 12%	0.071 15%	0.133 31%	0.023 14%	0.073 29%	0.041 12%	0.029 19%
Depreciation	USD per m % of Total	0.070 26%	0.050 27%	0.053 19%	0.046 31%	0.044 19%	0.042 29%	0.069 14%	0.059 14%	0.042 26%	0.054 21%	0.087 25%	0.034 23%
Interest	USD per m % of Total	0.043 16%	0.026 14%	0.017 6%	0.003 2%	0.023 10%	0.003 2%	0.018 4%	0.015 4%	0.018 11%	0.020 8%	0.027 8%	0.019 13%
Total	USD per m % of Total	0.27 100%	0.18 100%	0.28 100%	0.15 100%	0.23 100%	0.15 100%	0.49 100%	0.42 100%	0.16 100%	0.25 100%	0.35 100%	0.15 100%
Index: Italy		55	38	57	30	48	30	100	87	33	52	72	31

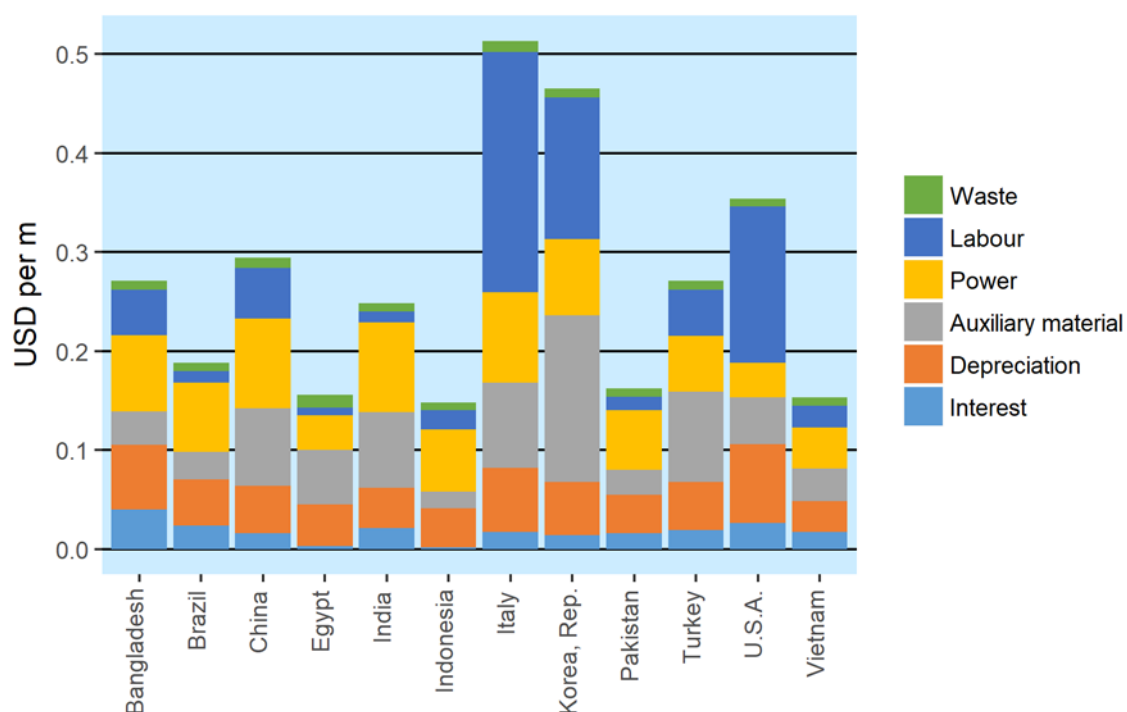
Manufacturing Cost 2018: Weaving Ring Yarn Fabric



Manufacturing Cost 2018: Weaving Rotor Yarn Fabric

Product	Unit	Bangladesh	Brazil	China	Egypt	India	Indonesia	Italy	Korea, Rep.	Pakistan	Turkey	U.S.A.	Vietnam
Waste	USD per m % of Total	0.009 3%	0.008 4%	0.010 3%	0.013 8%	0.008 3%	0.008 5%	0.011 2%	0.009 2%	0.008 5%	0.009 3%	0.008 2%	0.008 5%
Labour	USD per m % of Total	0.046 17%	0.012 6%	0.051 17%	0.008 5%	0.011 4%	0.019 13%	0.243 47%	0.143 31%	0.014 9%	0.047 17%	0.158 45%	0.022 14%
Power	USD per m % of Total	0.077 28%	0.070 37%	0.091 31%	0.035 22%	0.091 37%	0.063 43%	0.091 18%	0.077 17%	0.060 37%	0.056 21%	0.035 10%	0.042 27%
Auxiliary material	USD per m % of Total	0.034 13%	0.028 15%	0.078 27%	0.055 35%	0.076 31%	0.017 11%	0.086 17%	0.168 36%	0.025 15%	0.091 34%	0.047 13%	0.033 22%
Depreciation	USD per m % of Total	0.065 24%	0.046 24%	0.048 16%	0.042 27%	0.041 17%	0.039 26%	0.065 13%	0.054 12%	0.039 24%	0.049 18%	0.080 23%	0.031 20%
Interest	USD per m % of Total	0.040 15%	0.024 13%	0.016 5%	0.003 2%	0.021 8%	0.002 1%	0.017 3%	0.014 3%	0.016 10%	0.019 7%	0.026 7%	0.017 11%
Total	USD per m % of Total	0.27 100%	0.19 100%	0.29 100%	0.16 100%	0.25 100%	0.15 100%	0.51 100%	0.46 100%	0.16 100%	0.27 100%	0.35 100%	0.15 100%
Index: Italy		53	37	57	30	48	29	100	91	32	53	69	30

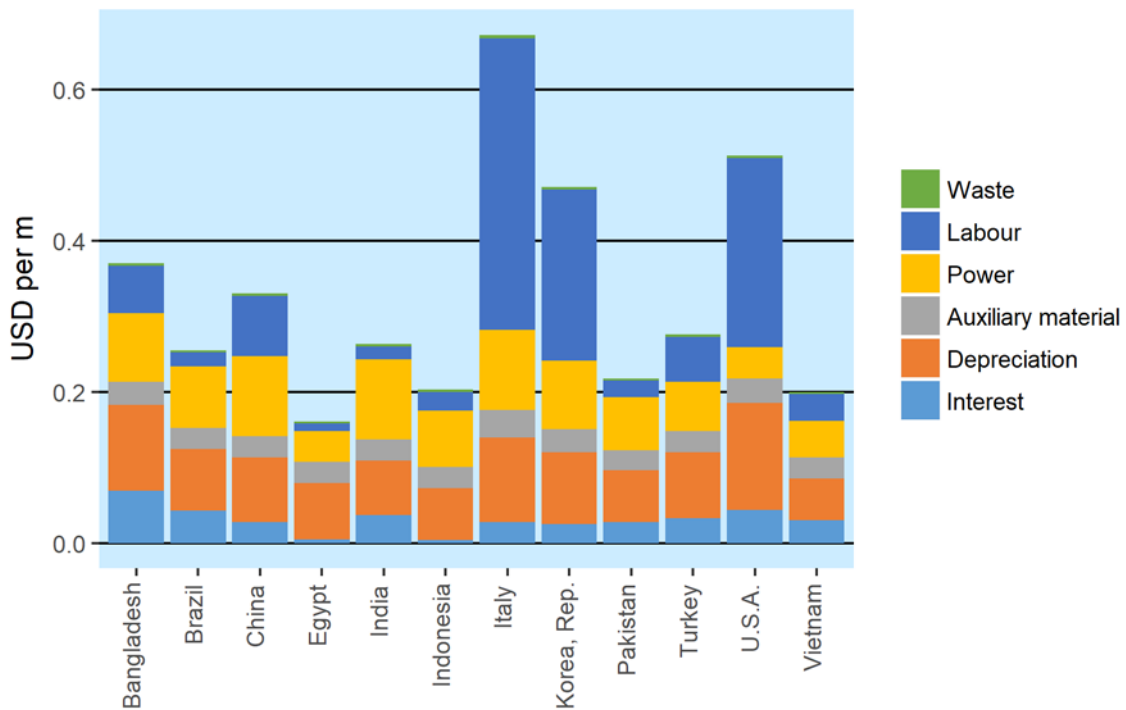
Manufacturing Cost 2018: Weaving Rotor Yarn Fabric



Manufacturing Cost 2018: Weaving Textured Yarn Fabric

Product	Unit	Bangladesh	Brazil	China	Egypt	India	Indonesia	Italy	Korea, Rep.	Pakistan	Turkey	U.S.A.	Vietnam
Waste	USD per m % of Total	0.003 1%	0.003 1%	0.003 1%	0.003 2%	0.003 1%	0.003 1%	0.004 1%	0.003 1%	0.003 1%	0.003 1%	0.004 1%	0.003 2%
Labour	USD per m % of Total	0.063 17%	0.018 7%	0.080 24%	0.010 6%	0.017 6%	0.025 12%	0.386 57%	0.227 48%	0.022 10%	0.060 22%	0.250 49%	0.035 18%
Power	USD per m % of Total	0.091 25%	0.082 32%	0.106 32%	0.041 25%	0.106 40%	0.074 36%	0.106 16%	0.090 19%	0.070 32%	0.065 24%	0.041 8%	0.049 24%
Auxiliary material	USD per m % of Total	0.030 8%	0.028 11%	0.028 8%	0.028 17%	0.028 11%	0.028 14%	0.036 5%	0.031 7%	0.027 12%	0.028 10%	0.033 6%	0.028 14%
Depreciation	USD per m % of Total	0.114 31%	0.081 32%	0.085 26%	0.074 46%	0.072 27%	0.069 34%	0.112 17%	0.095 20%	0.068 31%	0.087 32%	0.141 27%	0.055 27%
Interest	USD per m % of Total	0.069 19%	0.043 17%	0.028 8%	0.005 3%	0.037 14%	0.004 2%	0.028 4%	0.025 5%	0.028 13%	0.033 12%	0.044 9%	0.030 15%
Total	USD per m % of Total	0.37 100%	0.26 100%	0.33 100%	0.16 100%	0.26 100%	0.20 100%	0.67 100%	0.47 100%	0.22 100%	0.28 100%	0.51 100%	0.20 100%
Index: Italy		55	38	49	24	39	30	100	70	32	41	76	30

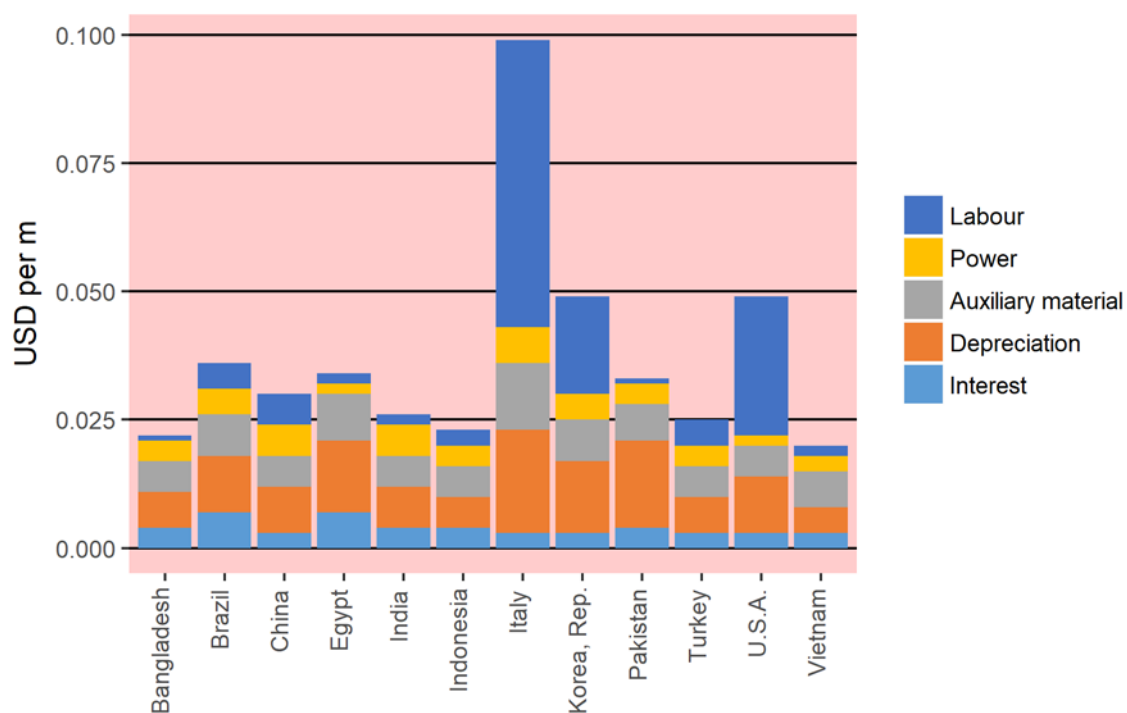
Manufacturing Cost 2018: Weaving Textured Yarn Fabric



Manufacturing Cost 2018: Knitting Ring Yarn Fabric

Product	Unit	Bangladesh	Brazil	China	Egypt	India	Indonesia	Italy	Korea, Rep.	Pakistan	Turkey	U.S.A.	Vietnam
Labour	USD per m % of Total	0.001 5%	0.005 14%	0.006 20%	0.002 6%	0.002 8%	0.003 13%	0.056 57%	0.019 39%	0.001 3%	0.005 20%	0.027 55%	0.002 10%
Power	USD per m % of Total	0.004 18%	0.005 14%	0.006 20%	0.002 6%	0.006 23%	0.004 17%	0.007 7%	0.005 10%	0.004 12%	0.004 16%	0.002 4%	0.003 15%
Auxiliary material	USD per m % of Total	0.006 27%	0.008 22%	0.006 20%	0.009 26%	0.006 23%	0.006 26%	0.013 13%	0.008 16%	0.007 21%	0.006 24%	0.006 12%	0.007 35%
Depreciation	USD per m % of Total	0.007 32%	0.011 31%	0.009 30%	0.014 41%	0.008 31%	0.006 26%	0.020 20%	0.014 29%	0.017 52%	0.007 28%	0.011 22%	0.005 25%
Interest	USD per m % of Total	0.004 18%	0.007 19%	0.003 10%	0.007 21%	0.004 15%	0.004 17%	0.003 3%	0.003 6%	0.004 12%	0.003 12%	0.003 6%	0.003 15%
Total	USD per m % of Total	0.02 100%	0.04 100%	0.03 100%	0.03 100%	0.03 100%	0.02 100%	0.10 100%	0.05 100%	0.03 100%	0.02 100%	0.05 100%	0.02 100%
Index: Italy		22	36	30	34	26	23	100	49	33	25	49	20

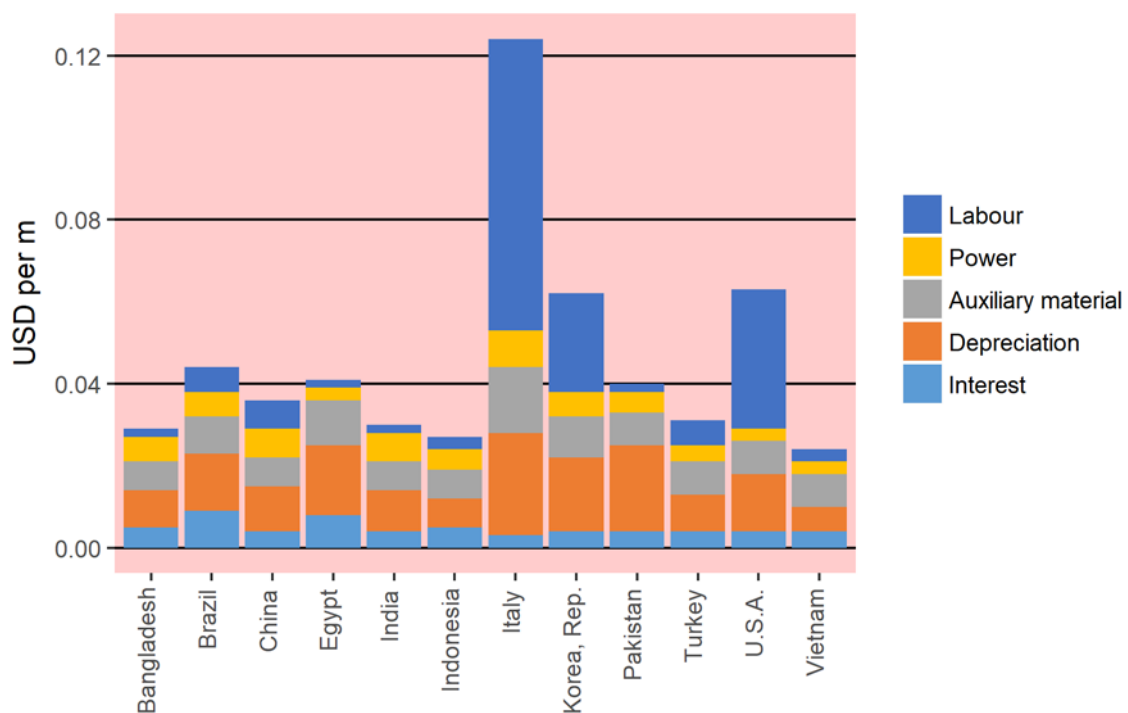
Manufacturing Cost 2018: Knitting Ring Yarn Fabric



Manufacturing Cost 2018: Knitting Rotor Yarn Fabric

Product	Unit	Bangladesh	Brazil	China	Egypt	India	Indonesia	Italy	Korea, Rep.	Pakistan	Turkey	U.S.A.	Vietnam
Labour	USD per m % of Total	0.002 7%	0.006 14%	0.007 19%	0.002 5%	0.002 7%	0.003 11%	0.071 57%	0.024 39%	0.002 5%	0.006 19%	0.034 54%	0.003 12%
Power	USD per m % of Total	0.006 21%	0.006 14%	0.007 19%	0.003 7%	0.007 23%	0.005 19%	0.009 7%	0.006 10%	0.005 12%	0.004 13%	0.003 5%	0.003 12%
Auxiliary material	USD per m % of Total	0.007 24%	0.009 20%	0.007 19%	0.011 27%	0.007 23%	0.007 26%	0.016 13%	0.010 16%	0.008 20%	0.008 26%	0.008 13%	0.008 33%
Depreciation	USD per m % of Total	0.009 31%	0.014 32%	0.011 31%	0.017 41%	0.010 33%	0.007 26%	0.025 20%	0.018 29%	0.021 52%	0.009 29%	0.014 22%	0.006 25%
Interest	USD per m % of Total	0.005 17%	0.009 20%	0.004 11%	0.008 20%	0.004 13%	0.005 19%	0.003 2%	0.004 6%	0.004 10%	0.004 13%	0.004 6%	0.004 17%
Total	USD per m % of Total	0.03 100%	0.04 100%	0.04 100%	0.04 100%	0.03 100%	0.03 100%	0.12 100%	0.06 100%	0.04 100%	0.03 100%	0.06 100%	0.02 100%
Index: Italy		23	35	29	33	24	22	100	50	32	25	51	19

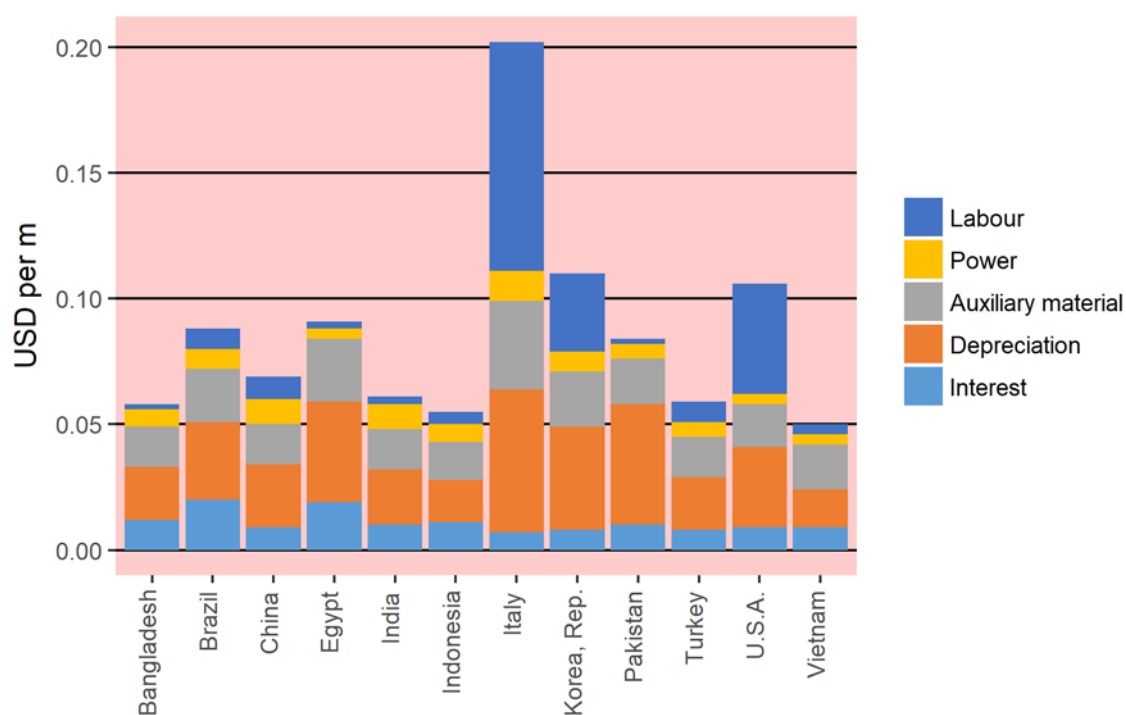
Manufacturing Cost 2018: Knitting Rotor Yarn Fabric



Manufacturing Cost 2018: Knitting Textured Yarn Fabric

Product	Unit	Bangladesh	Brazil	China	Egypt	India	Indonesia	Italy	Korea, Rep.	Pakistan	Turkey	U.S.A.	Vietnam
Labour	USD per m % of Total	0.002 3%	0.008 9%	0.009 13%	0.003 3%	0.003 5%	0.005 9%	0.091 45%	0.031 28%	0.002 2%	0.008 14%	0.044 42%	0.004 8%
Power	USD per m % of Total	0.007 12%	0.008 9%	0.010 14%	0.004 4%	0.010 16%	0.007 13%	0.012 6%	0.008 7%	0.006 7%	0.006 10%	0.004 4%	0.004 8%
Auxiliary material	USD per m % of Total	0.016 28%	0.021 24%	0.016 23%	0.025 27%	0.016 26%	0.015 27%	0.035 17%	0.022 20%	0.018 21%	0.016 27%	0.017 16%	0.018 36%
Depreciation	USD per m % of Total	0.021 36%	0.031 35%	0.025 36%	0.040 44%	0.022 36%	0.017 31%	0.057 28%	0.041 37%	0.048 57%	0.021 36%	0.032 30%	0.015 30%
Interest	USD per m % of Total	0.012 21%	0.020 23%	0.009 13%	0.019 21%	0.010 16%	0.011 20%	0.007 3%	0.008 7%	0.010 12%	0.008 14%	0.009 8%	0.009 18%
Total	USD per m % of Total	0.06 100%	0.09 100%	0.07 100%	0.09 100%	0.06 100%	0.06 100%	0.20 100%	0.11 100%	0.08 100%	0.06 100%	0.11 100%	0.05 100%
Index: Italy		29	44	34	45	30	27	100	54	42	29	52	25

Manufacturing Cost 2018: Knitting Textured Yarn Fabric



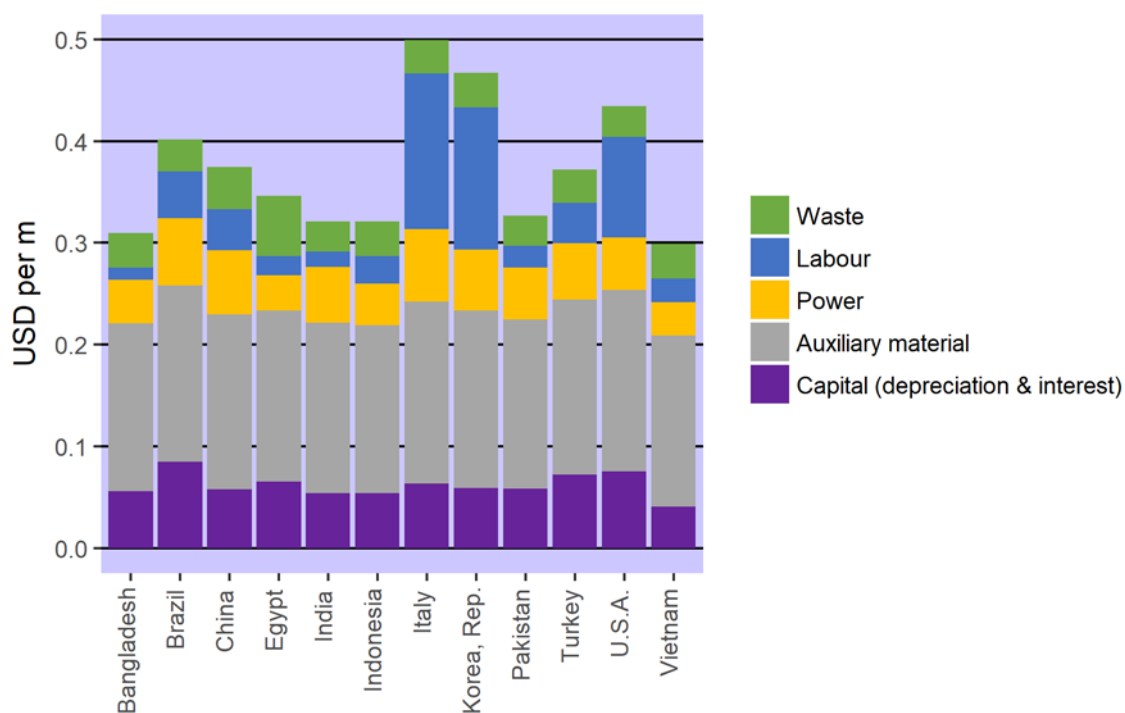
Manufacturing Cost 2018: Finishing - Woven - Continuous Open Width

Product	Unit	Bangladesh	Brazil	China	Egypt	India	Indonesia	Italy	Korea, Rep.	Pakistan	Turkey	U.S.A.	Vietnam
Waste	USD per m	0.03	0.03	0.04	0.06	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
	% of Total	11%	8%	11%	17%	9%	11%	7%	7%	9%	9%	7%	11%
Labour	USD per m	0.01	0.05	0.04	0.02	0.02	0.03	0.15	0.14	0.02	0.04	0.10	0.02
	% of Total	4%	11%	11%	5%	5%	8%	31%	30%	6%	11%	23%	8%
Power	USD per m	0.04	0.07	0.06	0.03	0.05	0.04	0.07	0.06	0.05	0.06	0.05	0.03
	% of Total	14%	16%	17%	10%	17%	13%	14%	13%	16%	15%	12%	11%
Auxiliary material*	USD per m	0.16	0.17	0.17	0.17	0.17	0.17	0.18	0.17	0.17	0.17	0.18	0.17
	% of Total	53%	43%	46%	49%	52%	51%	36%	37%	51%	46%	41%	56%
Capital**	USD per m	0.06	0.08	0.06	0.07	0.05	0.05	0.06	0.06	0.06	0.07	0.08	0.04
	% of Total	18%	21%	15%	19%	17%	17%	13%	13%	18%	19%	17%	14%
Total	USD per m	0.31	0.40	0.37	0.35	0.32	0.32	0.50	0.47	0.33	0.37	0.43	0.30
	% of Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Index: Italy		62	80	75	69	64	64	100	94	65	75	87	60

*The prices for dyestuffs and auxiliaries have been provided by CHT group.

**Capital costs include a linear depreciation of CAPEX (capital expenditure) over the depreciation period evaluated in each country plus the interest to be paid.

Manufacturing Cost 2018: Finishing - Woven - Continuous Open Width



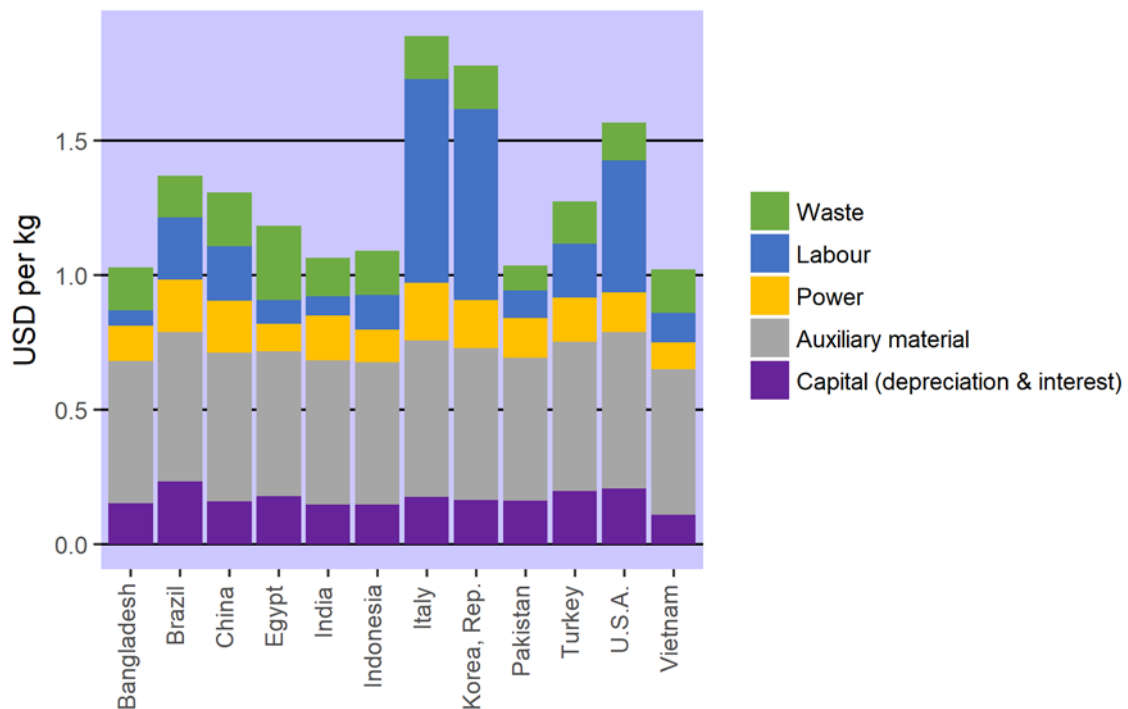
Manufacturing Cost 2018: Finishing - Knit - Continuous Open Width (COW)

Product	Unit	Bangladesh	Brazil	China	Egypt	India	Indonesia	Italy	Korea, Rep.	Pakistan	Turkey	U.S.A.	Vietnam
Waste	USD per kg	0.16	0.15	0.20	0.28	0.14	0.16	0.16	0.16	0.14	0.16	0.14	0.16
	% of Total	16%	11%	15%	23%	13%	15%	8%	9%	13%	12%	9%	16%
Labour	USD per kg	0.06	0.23	0.20	0.09	0.07	0.13	0.76	0.71	0.10	0.20	0.49	0.11
	% of Total	6%	17%	16%	8%	7%	12%	40%	40%	9%	16%	31%	11%
Power	USD per kg	0.13	0.20	0.19	0.10	0.17	0.12	0.21	0.18	0.15	0.16	0.15	0.10
	% of Total	13%	14%	15%	9%	16%	11%	11%	10%	14%	13%	9%	10%
Auxiliary material*	USD per kg	0.53	0.56	0.55	0.54	0.54	0.53	0.58	0.56	0.53	0.55	0.58	0.54
	% of Total	51%	41%	42%	46%	50%	48%	31%	32%	49%	44%	37%	53%
Capital**	USD per kg	0.15	0.23	0.16	0.18	0.15	0.15	0.18	0.16	0.16	0.20	0.21	0.11
	% of Total	15%	17%	12%	15%	14%	13%	9%	9%	15%	16%	13%	11%
Total	USD per kg	1.03	1.37	1.31	1.18	1.06	1.09	1.89	1.78	1.08	1.27	1.57	1.02
	% of Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Index: Italy		54	73	69	63	56	58	100	94	57	67	83	54

*The prices for dyestuffs and auxiliaries have been provided by CHT group.

**Capital costs include a linear depreciation of CAPEX (capital expenditure) over the depreciation period evaluated in each country plus the interest to be paid.

Manufacturing Cost 2018: Finishing - Knit - Continuous Open Width (COW)



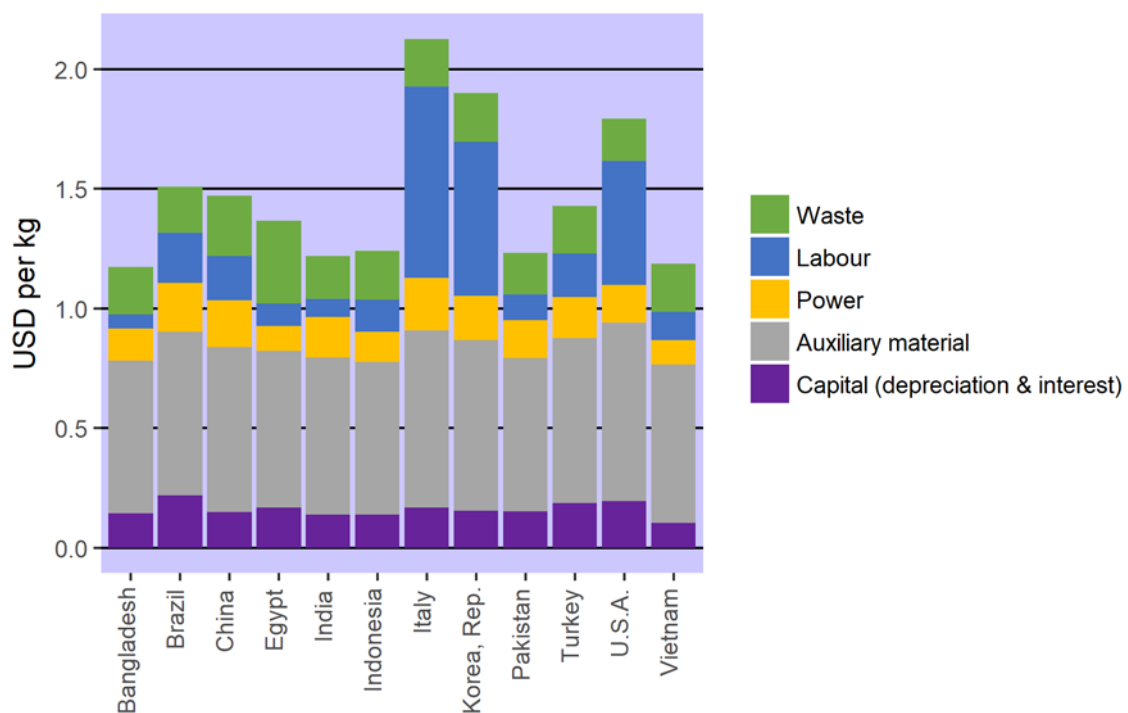
Manufacturing Cost 2018: Finishing - Knit - Discontinuous (JET)

Product	Unit	Bangladesh	Brazil	China	Egypt	India	Indonesia	Italy	Korea, Rep.	Pakistan	Turkey	U.S.A.	Vietnam
Waste	USD per kg	0.20	0.19	0.25	0.34	0.18	0.20	0.20	0.20	0.17	0.20	0.18	0.20
	% of Total	17%	13%	17%	25%	15%	16%	9%	11%	14%	14%	10%	17%
Labour	USD per kg	0.06	0.21	0.19	0.09	0.08	0.13	0.80	0.64	0.11	0.18	0.52	0.12
	% of Total	5%	14%	13%	7%	6%	11%	38%	34%	9%	13%	29%	10%
Power	USD per kg	0.13	0.20	0.20	0.11	0.17	0.13	0.22	0.19	0.16	0.17	0.16	0.10
	% of Total	11%	13%	13%	8%	14%	10%	10%	10%	13%	12%	9%	9%
Auxiliary material*	USD per kg	0.64	0.68	0.69	0.65	0.66	0.64	0.74	0.71	0.64	0.69	0.75	0.66
	% of Total	54%	45%	47%	48%	54%	51%	35%	37%	52%	48%	42%	56%
Capital**	USD per kg	0.14	0.22	0.15	0.17	0.14	0.14	0.17	0.16	0.15	0.19	0.20	0.10
	% of Total	12%	15%	10%	12%	11%	11%	8%	8%	12%	13%	11%	9%
Total	USD per kg	1.17	1.51	1.47	1.37	1.22	1.24	2.13	1.90	1.23	1.43	1.79	1.19
	% of Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Index: Italy		55	71	69	64	57	58	100	89	58	67	84	56

*The prices for dyestuffs and auxiliaries have been provided by CHT group.

**Capital costs include a linear depreciation of CAPEX (capital expenditure) over the depreciation period evaluated in each country plus the interest to be paid.

Manufacturing Cost 2018: Finishing - Knit - Discontinuous (JET)

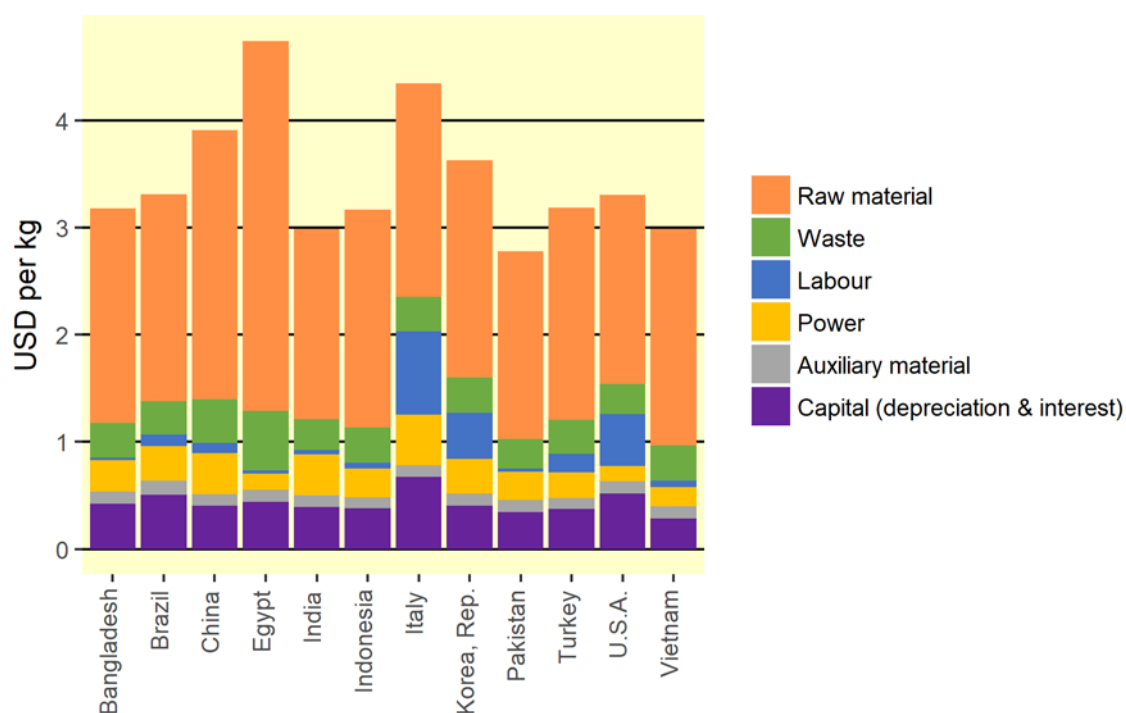


Total Cost 2018: Spinning Ring/NE30

Product	Unit	Bangladesh	Brazil	China	Egypt	India	Indonesia	Italy	Korea, Rep.	Pakistan	Turkey	U.S.A.	Vietnam
Waste	USD per kg % of Total	0.32 10%	0.31 9%	0.40 10%	0.56 12%	0.29 10%	0.33 10%	0.32 7%	0.33 9%	0.27 10%	0.32 10%	0.28 9%	0.32 11%
Labour	USD per kg % of Total	0.02 1%	0.11 3%	0.09 2%	0.03 1%	0.04 1%	0.06 2%	0.78 18%	0.43 12%	0.03 1%	0.17 5%	0.48 15%	0.06 2%
Power	USD per kg % of Total	0.30 9%	0.33 10%	0.38 10%	0.15 3%	0.38 13%	0.27 8%	0.47 11%	0.33 9%	0.27 10%	0.24 7%	0.15 4%	0.18 6%
Auxiliary material	USD per kg % of Total	0.11 3%	0.13 4%	0.11 3%	0.11 2%	0.11 4%	0.10 3%	0.11 2%	0.11 3%	0.11 4%	0.10 3%	0.11 3%	0.11 4%
Capital*	USD per kg % of Total	0.42 13%	0.51 15%	0.40 10%	0.44 9%	0.39 13%	0.38 12%	0.68 16%	0.41 11%	0.35 12%	0.38 12%	0.52 16%	0.29 10%
Raw material	USD per kg % of Total	2.00 63%	1.93 58%	2.51 64%	3.45 73%	1.78 60%	2.03 64%	1.99 46%	2.03 56%	1.75 63%	1.98 62%	1.76 53%	2.02 68%
Total	USD per kg % of Total	3.18 100%	3.31 100%	3.91 100%	4.74 100%	2.99 100%	3.17 100%	4.35 100%	3.63 100%	2.78 100%	3.18 100%	3.31 100%	2.99 100%
Index: Italy		73	76	90	109	69	73	100	83	64	73	76	69

*depreciation & interest

Total Cost 2018: Spinning Ring/NE30

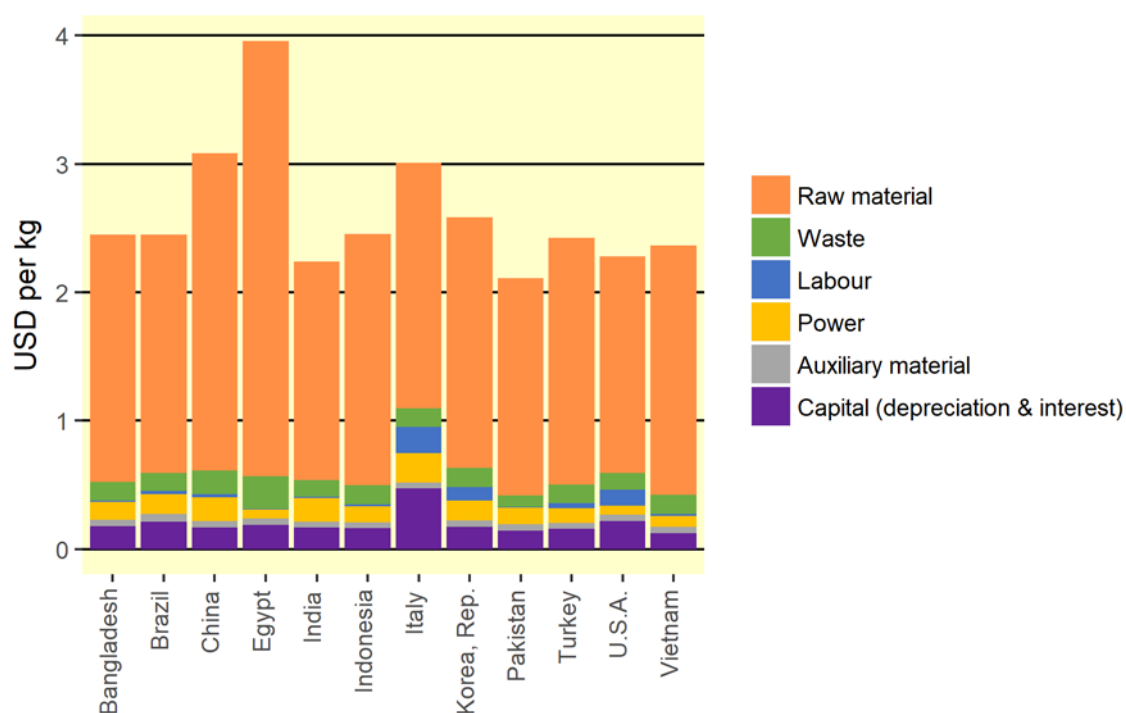


Total Cost 2018: Spinning Rotor/NE20

Product	Unit	Bangladesh	Brazil	China	Egypt	India	Indonesia	Italy	Korea, Rep.	Pakistan	Turkey	U.S.A.	Vietnam
Waste	USD per kg % of Total	0.14 6%	0.14 6%	0.18 6%	0.25 6%	0.13 6%	0.15 6%	0.14 5%	0.15 6%	0.09 4%	0.14 6%	0.13 6%	0.15 6%
Labour	USD per kg % of Total	0.01 0%	0.03 1%	0.02 1%	0.01 0%	0.01 0%	0.01 1%	0.20 7%	0.11 4%	0.01 0%	0.04 2%	0.13 6%	0.02 1%
Power	USD per kg % of Total	0.14 6%	0.15 6%	0.18 6%	0.07 2%	0.18 8%	0.13 5%	0.23 8%	0.15 6%	0.13 6%	0.11 5%	0.07 3%	0.08 4%
Auxiliary material	USD per kg % of Total	0.05 2%	0.06 2%	0.05 2%	0.05 1%	0.05 2%	0.05 2%	0.05 2%	0.05 2%	0.05 2%	0.05 2%	0.05 2%	0.05 2%
Capital	USD per kg % of Total	0.18 7%	0.21 9%	0.17 6%	0.19 5%	0.17 7%	0.16 7%	0.47 16%	0.17 7%	0.14 7%	0.16 7%	0.22 10%	0.12 5%
Raw material	USD per kg % of Total	1.93 79%	1.85 76%	2.47 80%	3.39 86%	1.70 76%	1.96 80%	1.92 64%	1.95 76%	1.69 80%	1.92 79%	1.69 74%	1.95 82%
Total	USD per kg % of Total	2.45 100%	2.45 100%	3.08 100%	3.96 100%	2.24 100%	2.45 100%	3.01 100%	2.58 100%	2.11 100%	2.42 100%	2.28 100%	2.37 100%
Index: Italy		81	81	102	131	74	82	100	86	70	81	76	79

*depreciation & interest

Total Cost 2018: Spinning Rotor/NE20

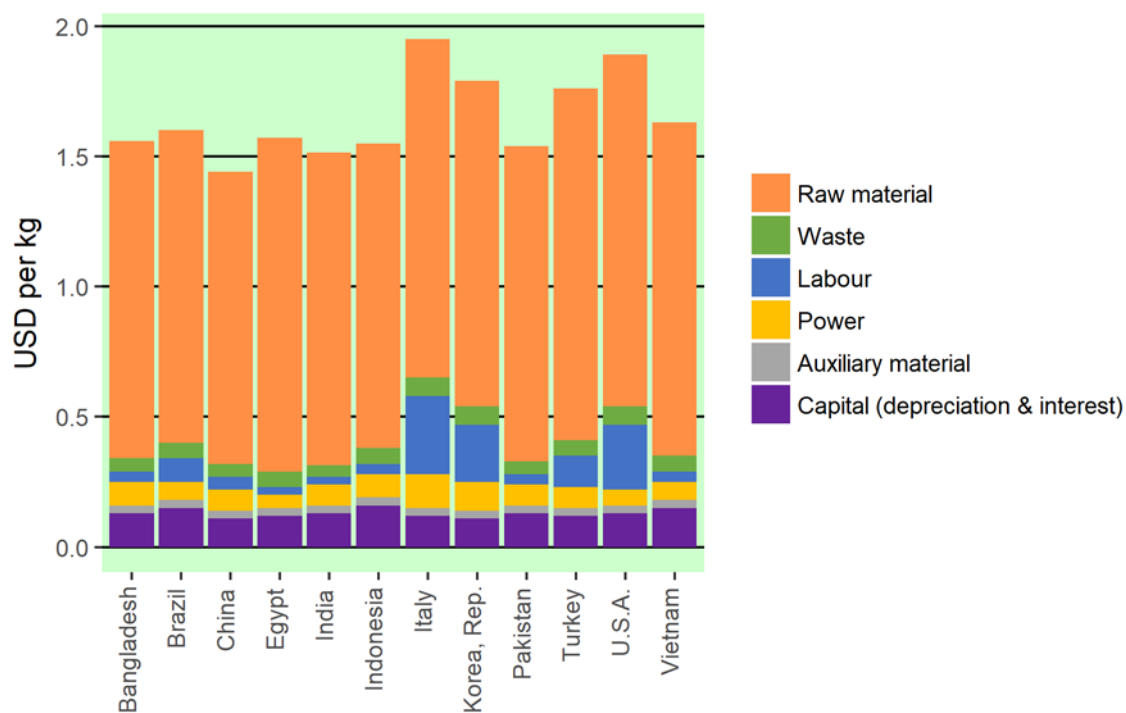


Total Cost 2018: Texturing (75den/72F)

Product	Unit	Bangladesh	Brazil	China	Egypt	India	Indonesia	Italy	Korea, Rep.	Pakistan	Turkey	U.S.A.	Vietnam
Waste	USD per kg % of Total	0.05 3%	0.06 4%	0.05 3%	0.06 4%	0.04 3%	0.06 4%	0.07 4%	0.07 4%	0.05 3%	0.06 3%	0.07 4%	0.06 4%
Labour	USD per kg % of Total	0.04 3%	0.09 6%	0.05 3%	0.03 2%	0.03 2%	0.04 3%	0.30 15%	0.22 12%	0.04 3%	0.12 7%	0.25 13%	0.04 2%
Power	USD per kg % of Total	0.09 6%	0.07 4%	0.08 6%	0.05 3%	0.08 5%	0.09 6%	0.13 7%	0.11 6%	0.08 5%	0.08 5%	0.06 3%	0.07 4%
Auxiliary material	USD per kg % of Total	0.03 2%	0.03 2%	0.03 2%	0.03 2%	0.03 2%	0.03 2%	0.03 2%	0.03 2%	0.03 2%	0.03 2%	0.03 2%	0.03 2%
Capital	USD per kg % of Total	0.13 8%	0.15 9%	0.11 8%	0.12 8%	0.13 9%	0.16 10%	0.12 6%	0.11 6%	0.13 8%	0.12 7%	0.13 7%	0.15 9%
Raw material	USD per kg % of Total	1.22 78%	1.20 75%	1.12 78%	1.28 82%	1.20 79%	1.17 75%	1.30 67%	1.25 70%	1.21 79%	1.35 77%	1.35 71%	1.28 79%
Total	USD per kg % of Total	1.56 100%	1.60 100%	1.44 100%	1.57 100%	1.51 100%	1.55 100%	1.95 100%	1.79 100%	1.54 100%	1.76 100%	1.89 100%	1.63 100%
Index: Italy		80	82	74	81	78	79	100	92	79	90	97	84

*depreciation & interest

Total Cost 2018: Texturing (75den/72F)

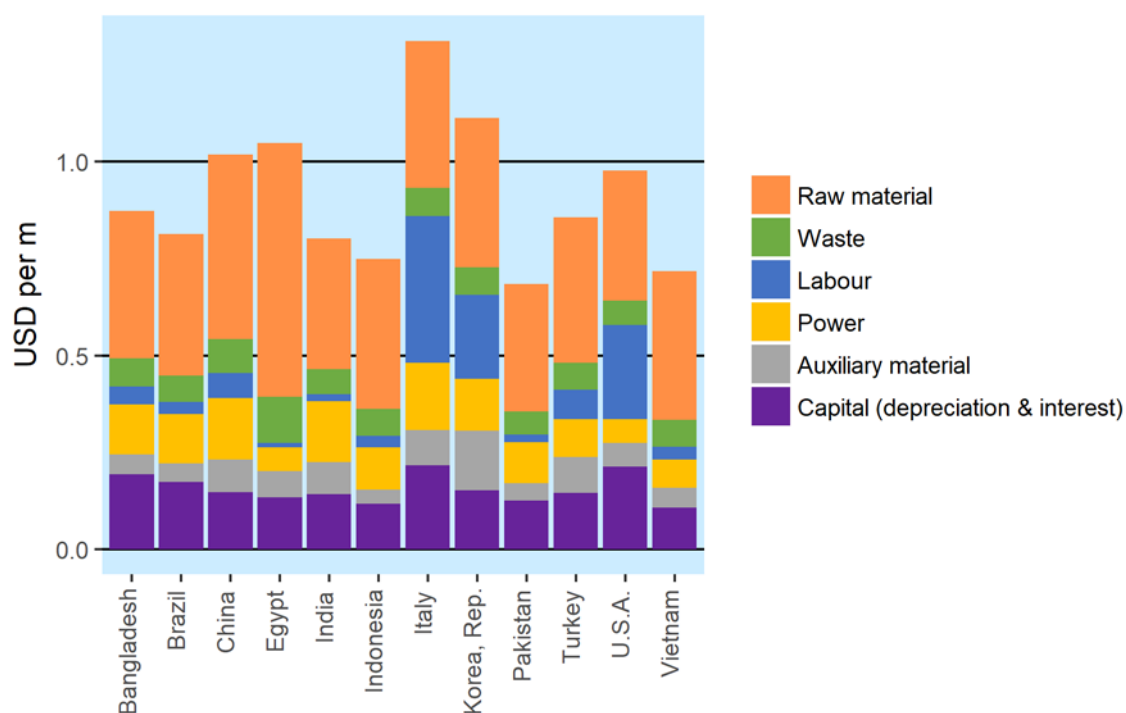


Total Cost 2018: Weaving Ring Yarn Fabric

Product	Unit	Bangladesh	Brazil	China	Egypt	India	Indonesia	Italy	Korea, Rep.	Pakistan	Turkey	U.S.A.	Vietnam
Waste	USD per m % of Total	0.072 8%	0.067 8%	0.087 9%	0.119 11%	0.063 8%	0.070 9%	0.074 6%	0.072 6%	0.060 9%	0.070 8%	0.064 7%	0.070 10%
Labour	USD per m % of Total	0.047 5%	0.031 4%	0.066 6%	0.012 1%	0.018 2%	0.029 4%	0.378 29%	0.216 19%	0.019 3%	0.077 9%	0.243 25%	0.033 5%
Power	USD per m % of Total	0.128 15%	0.127 16%	0.158 16%	0.061 6%	0.158 20%	0.110 15%	0.175 13%	0.134 12%	0.107 16%	0.097 11%	0.061 6%	0.073 10%
Auxiliary material	USD per m % of Total	0.051 6%	0.049 6%	0.085 8%	0.067 6%	0.083 10%	0.036 5%	0.091 7%	0.154 14%	0.044 6%	0.092 11%	0.062 6%	0.050 7%
Capital	USD per m % of Total	0.194 22%	0.173 21%	0.147 14%	0.133 13%	0.141 18%	0.117 16%	0.215 16%	0.151 14%	0.126 18%	0.146 17%	0.213 22%	0.108 15%
Raw material	USD per m % of Total	0.381 44%	0.367 45%	0.478 47%	0.656 63%	0.338 42%	0.386 52%	0.378 29%	0.386 35%	0.329 48%	0.375 44%	0.335 34%	0.384 54%
Total	USD per m % of Total	0.87 100%	0.81 100%	1.02 100%	1.05 100%	0.80 100%	0.75 100%	1.31 100%	1.11 100%	0.68 100%	0.86 100%	0.98 100%	0.72 100%
Index: Italy		67	62	78	80	61	57	100	85	52	65	75	55

*depreciation & interest

Total Cost 2018: Weaving Ring Yarn Fabric

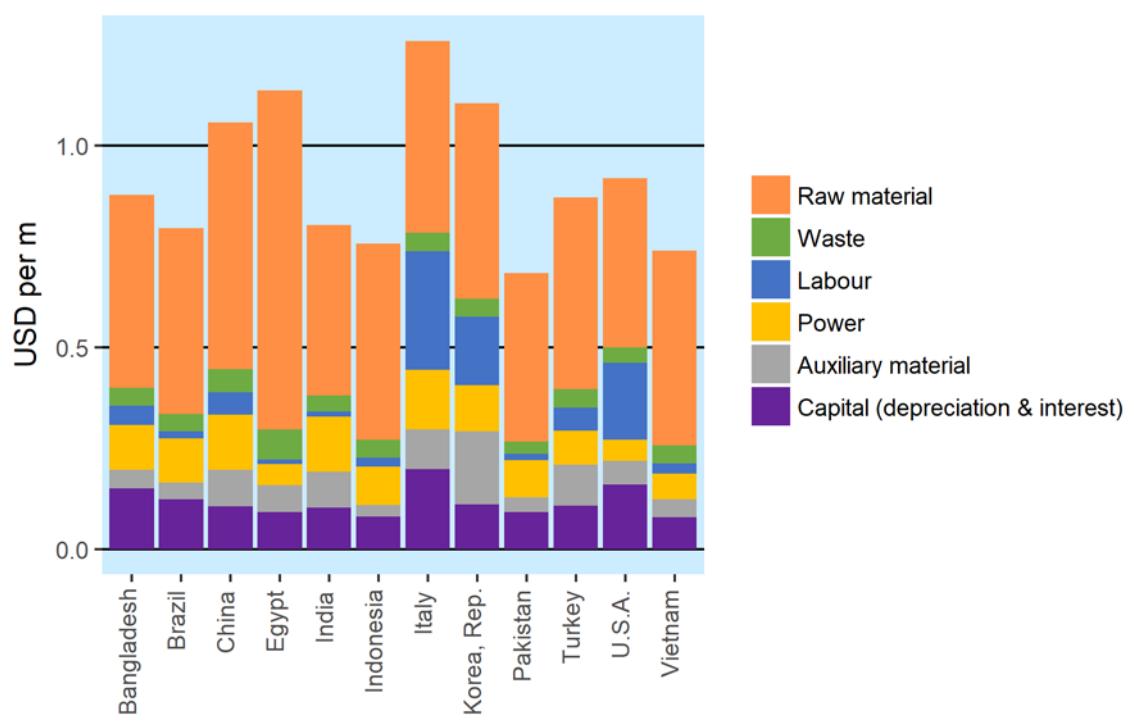


Total Cost 2018: Weaving Rotor Yarn Fabric

Product	Unit	Bangladesh	Brazil	China	Egypt	India	Indonesia	Italy	Korea, Rep.	Pakistan	Turkey	U.S.A.	Vietnam
Waste	USD per m	0.045	0.043	0.056	0.076	0.039	0.044	0.047	0.045	0.030	0.045	0.039	0.044
	% of Total	5%	5%	5%	7%	5%	6%	4%	4%	4%	5%	4%	6%
Labour	USD per m	0.047	0.018	0.057	0.010	0.013	0.023	0.294	0.170	0.016	0.058	0.189	0.026
	% of Total	5%	2%	5%	1%	2%	3%	23%	15%	2%	7%	21%	4%
Power	USD per m	0.112	0.108	0.137	0.052	0.137	0.094	0.147	0.115	0.091	0.084	0.052	0.063
	% of Total	13%	14%	13%	5%	17%	12%	12%	10%	13%	10%	6%	8%
Auxiliary material	USD per m	0.046	0.042	0.090	0.067	0.088	0.028	0.098	0.180	0.037	0.102	0.059	0.045
	% of Total	5%	5%	8%	6%	11%	4%	8%	16%	5%	12%	6%	6%
Capital	USD per m	0.150	0.123	0.106	0.092	0.103	0.081	0.199	0.111	0.091	0.107	0.161	0.079
	% of Total	17%	15%	10%	8%	13%	11%	16%	10%	13%	12%	17%	11%
Raw material	USD per m	0.478	0.460	0.613	0.840	0.422	0.485	0.475	0.484	0.419	0.476	0.418	0.483
	% of Total	54%	58%	58%	74%	53%	64%	38%	44%	61%	55%	46%	65%
Total	USD per m	0.88	0.79	1.06	1.14	0.80	0.76	1.26	1.11	0.68	0.87	0.92	0.74
	% of Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Index: Italy		70	63	84	90	64	60	100	88	54	69	73	59

*depreciation & interest

Total Cost 2018: Weaving Rotor Yarn Fabric

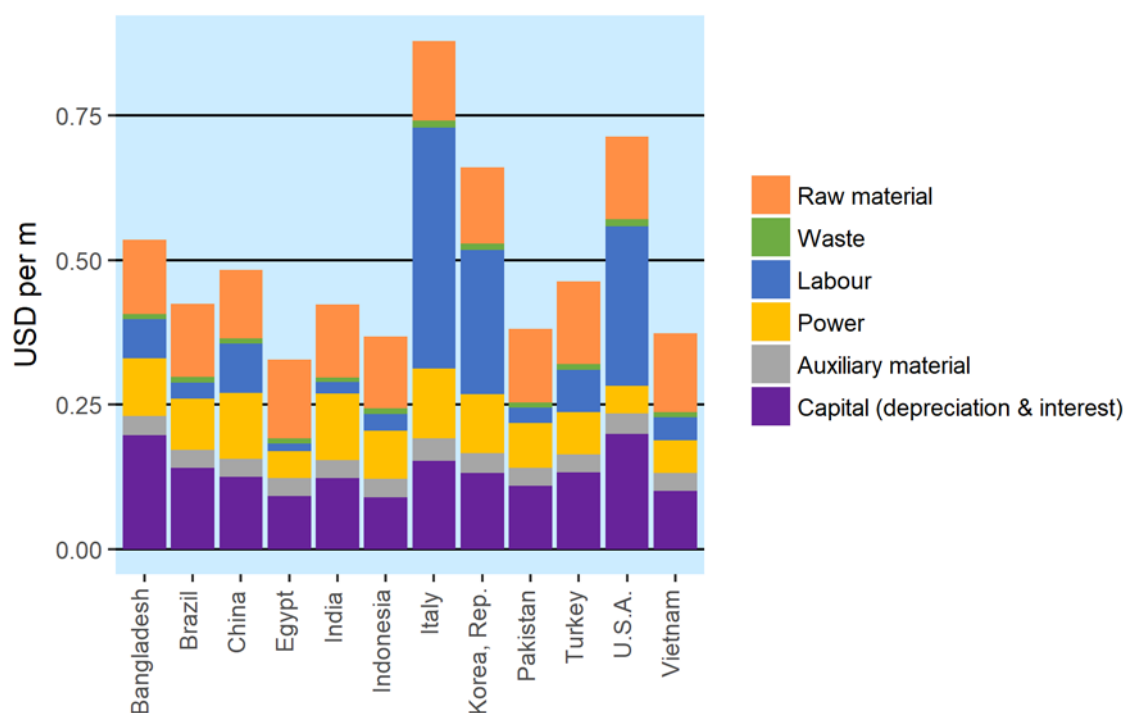


Total Cost 2018: Weaving Textured Yarn Fabric

Product	Unit	Bangladesh	Brazil	China	Egypt	India	Indonesia	Italy	Korea, Rep.	Pakistan	Turkey	U.S.A.	Vietnam
Waste	USD per m % of Total	0.008 2%	0.009 2%	0.008 2%	0.009 3%	0.008 2%	0.009 3%	0.011 1%	0.010 2%	0.008 2%	0.009 2%	0.011 2%	0.009 3%
Labour	USD per m % of Total	0.067 13%	0.028 6%	0.085 18%	0.013 4%	0.020 5%	0.029 8%	0.418 48%	0.250 38%	0.026 7%	0.073 16%	0.277 39%	0.039 11%
Power	USD per m % of Total	0.101 19%	0.089 21%	0.114 24%	0.046 14%	0.114 27%	0.084 23%	0.120 14%	0.102 15%	0.078 21%	0.073 16%	0.047 7%	0.056 15%
Auxiliary material	USD per m % of Total	0.033 6%	0.031 7%	0.031 6%	0.031 10%	0.031 7%	0.031 8%	0.039 4%	0.034 5%	0.030 8%	0.031 7%	0.036 5%	0.031 8%
Capital	USD per m % of Total	0.197 37%	0.140 33%	0.125 26%	0.092 28%	0.123 29%	0.090 24%	0.153 17%	0.132 20%	0.110 29%	0.133 29%	0.199 28%	0.101 27%
Raw material	USD per m % of Total	0.129 24%	0.127 30%	0.119 25%	0.136 41%	0.127 30%	0.124 34%	0.138 16%	0.133 20%	0.128 34%	0.143 31%	0.143 20%	0.136 36%
Total	USD per m % of Total	0.54 100%	0.42 100%	0.48 100%	0.33 100%	0.42 100%	0.37 100%	0.88 100%	0.66 100%	0.38 100%	0.46 100%	0.71 100%	0.37 100%
Index: Italy		61	48	55	37	48	42	100	75	43	53	81	42

*depreciation & interest

Total Cost 2018: Weaving Textured Yarn Fabric

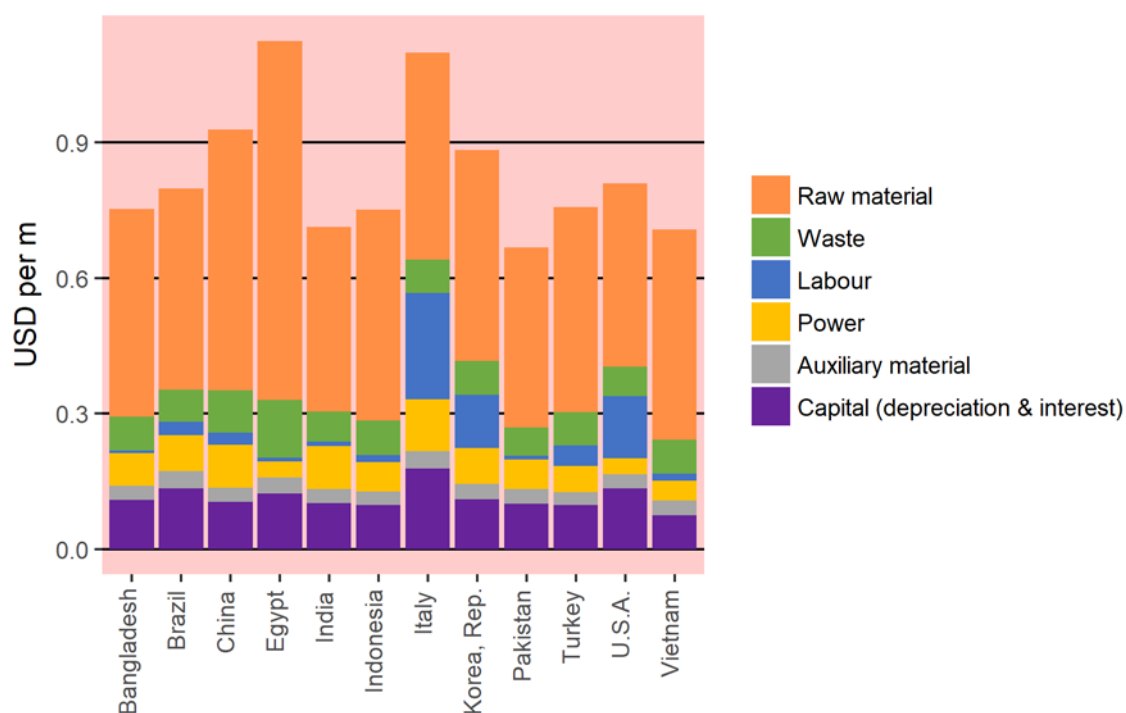


Total Cost 2018: Knitting Ring Yarn Fabric

Product	Unit	Bangladesh	Brazil	China	Egypt	India	Indonesia	Italy	Korea, Rep.	Pakistan	Turkey	U.S.A.	Vietnam
Waste	USD per m	0.074	0.072	0.093	0.128	0.066	0.075	0.074	0.075	0.063	0.074	0.065	0.075
	% of Total	10%	9%	10%	11%	9%	10%	7%	9%	9%	10%	8%	11%
Labour	USD per m	0.006	0.029	0.028	0.008	0.011	0.016	0.235	0.117	0.008	0.045	0.138	0.016
	% of Total	1%	4%	3%	1%	2%	2%	21%	13%	1%	6%	17%	2%
Power	USD per m	0.072	0.080	0.095	0.036	0.095	0.065	0.116	0.080	0.065	0.058	0.036	0.044
	% of Total	10%	10%	10%	3%	13%	9%	11%	9%	10%	8%	4%	6%
Auxiliary material	USD per m	0.031	0.037	0.031	0.035	0.031	0.029	0.038	0.034	0.033	0.029	0.031	0.033
	% of Total	4%	5%	3%	3%	4%	4%	3%	4%	5%	4%	4%	5%
Capital	USD per m	0.109	0.135	0.105	0.123	0.102	0.098	0.178	0.110	0.101	0.097	0.134	0.074
	% of Total	14%	17%	11%	11%	14%	13%	16%	12%	15%	13%	17%	10%
Raw material	USD per m	0.461	0.444	0.578	0.794	0.409	0.468	0.458	0.467	0.398	0.454	0.406	0.465
	% of Total	61%	56%	62%	71%	57%	62%	42%	53%	60%	60%	50%	66%
Total	USD per m	0.75	0.80	0.93	1.12	0.71	0.75	1.10	0.88	0.67	0.76	0.81	0.71
	% of Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Index: Italy		69	73	85	102	65	68	100	80	61	69	74	64

*depreciation & interest

Total Cost 2018: Knitting Ring Yarn Fabric

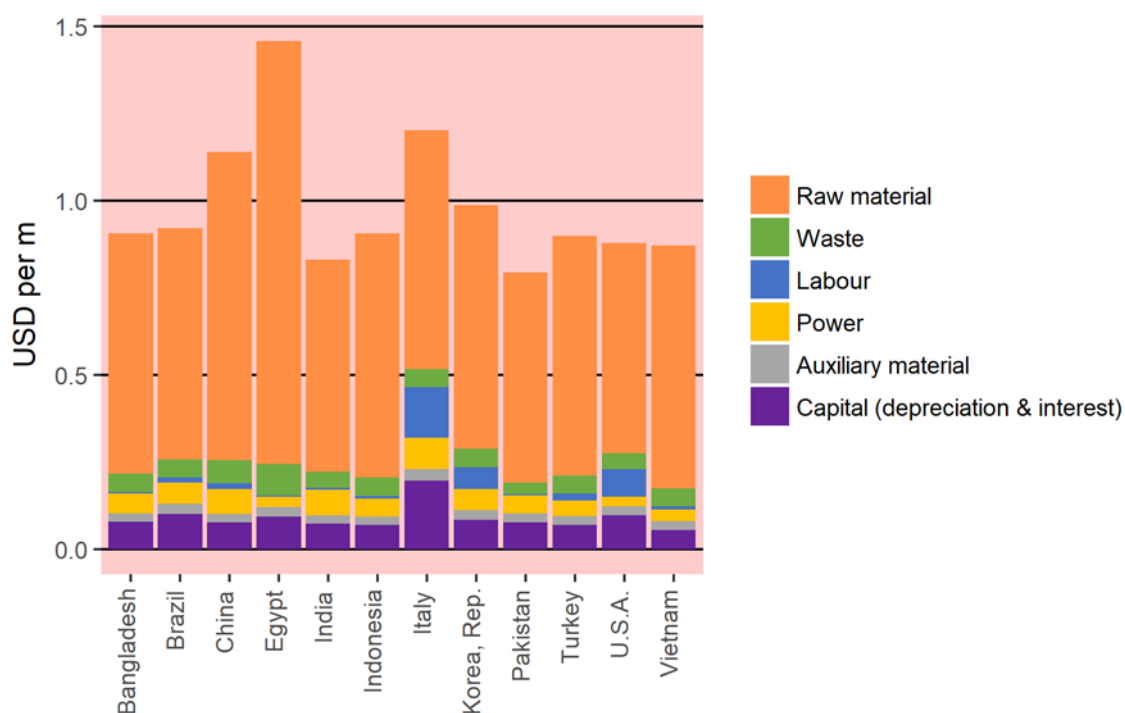


Total Cost 2018: Knitting Rotor Yarn Fabric

Product	Unit	Bangladesh	Brazil	China	Egypt	India	Indonesia	Italy	Korea, Rep.	Pakistan	Turkey	U.S.A.	Vietnam
Waste	USD per m % of Total	0.052 6%	0.050 5%	0.066 6%	0.091 6%	0.045 5%	0.053 6%	0.052 4%	0.052 5%	0.032 4%	0.052 6%	0.045 5%	0.052 6%
Labour	USD per m % of Total	0.004 0%	0.015 2%	0.015 1%	0.005 0%	0.006 1%	0.008 1%	0.144 12%	0.062 6%	0.005 1%	0.021 2%	0.079 9%	0.009 1%
Power	USD per m % of Total	0.056 6%	0.061 7%	0.073 6%	0.028 2%	0.073 9%	0.050 6%	0.090 7%	0.061 6%	0.050 6%	0.044 5%	0.028 3%	0.033 4%
Auxiliary material	USD per m % of Total	0.025 3%	0.029 3%	0.024 2%	0.029 2%	0.024 3%	0.023 3%	0.033 3%	0.028 3%	0.026 3%	0.024 3%	0.025 3%	0.026 3%
Capital	USD per m % of Total	0.078 9%	0.100 11%	0.076 7%	0.092 6%	0.073 9%	0.070 8%	0.197 16%	0.084 8%	0.077 10%	0.070 8%	0.097 11%	0.054 6%
Raw material	USD per m % of Total	0.690 76%	0.664 72%	0.884 78%	1.213 83%	0.609 73%	0.701 77%	0.686 57%	0.699 71%	0.604 76%	0.687 76%	0.604 69%	0.697 80%
Total	USD per m % of Total	0.91 100%	0.92 100%	1.14 100%	1.46 100%	0.83 100%	0.91 100%	1.20 100%	0.99 100%	0.79 100%	0.90 100%	0.88 100%	0.87 100%
Index: Italy		75	77	95	121	69	75	100	82	66	75	73	73

*depreciation & interest

Total Cost 2018: Knitting Rotor Yarn Fabric

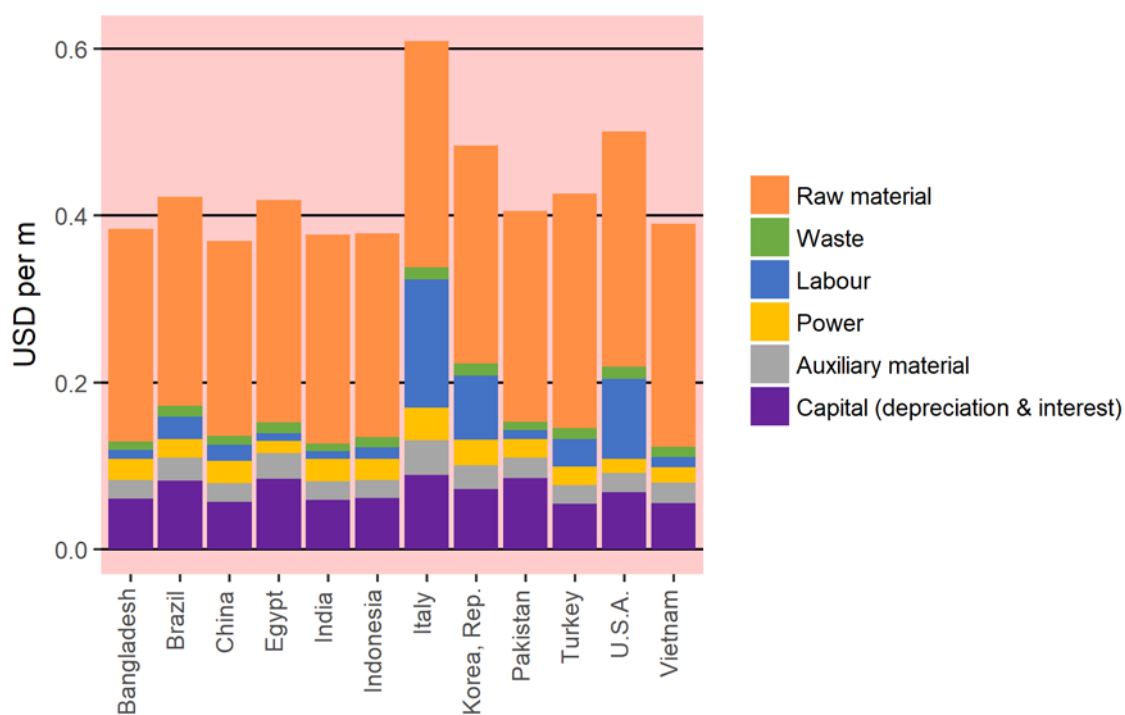


Total Cost 2018: Knitting Textured Yarn Fabric

Product	Unit	Bangladesh	Brazil	China	Egypt	India	Indonesia	Italy	Korea, Rep.	Pakistan	Turkey	U.S.A.	Vietnam
Waste	USD per m % of Total	0.010 3%	0.013 3%	0.010 3%	0.013 3%	0.009 2%	0.013 3%	0.015 2%	0.015 3%	0.010 3%	0.013 3%	0.015 3%	0.013 3%
Labour	USD per m % of Total	0.010 3%	0.027 6%	0.019 5%	0.009 2%	0.009 2%	0.013 4%	0.154 25%	0.077 16%	0.010 3%	0.033 8%	0.096 19%	0.012 3%
Power	USD per m % of Total	0.026 7%	0.023 5%	0.027 7%	0.014 3%	0.027 7%	0.026 7%	0.039 6%	0.031 6%	0.023 6%	0.023 5%	0.017 3%	0.019 5%
Auxiliary material	USD per m % of Total	0.022 6%	0.027 6%	0.022 6%	0.031 7%	0.022 6%	0.021 6%	0.041 7%	0.028 6%	0.024 6%	0.022 5%	0.023 5%	0.024 6%
Capital	USD per m % of Total	0.060 16%	0.082 19%	0.057 15%	0.084 20%	0.059 16%	0.061 16%	0.089 15%	0.072 15%	0.085 21%	0.054 13%	0.068 14%	0.055 14%
Raw material	USD per m % of Total	0.255 66%	0.251 59%	0.234 63%	0.268 64%	0.251 66%	0.245 65%	0.272 45%	0.261 54%	0.253 62%	0.282 66%	0.282 56%	0.268 68%
Total	USD per m % of Total	0.38 100%	0.42 100%	0.37 100%	0.42 100%	0.38 100%	0.38 100%	0.61 100%	0.48 100%	0.41 100%	0.43 100%	0.50 100%	0.39 100%
Index: Italy		63	69	61	69	62	62	100	79	67	70	82	64

*depreciation & interest

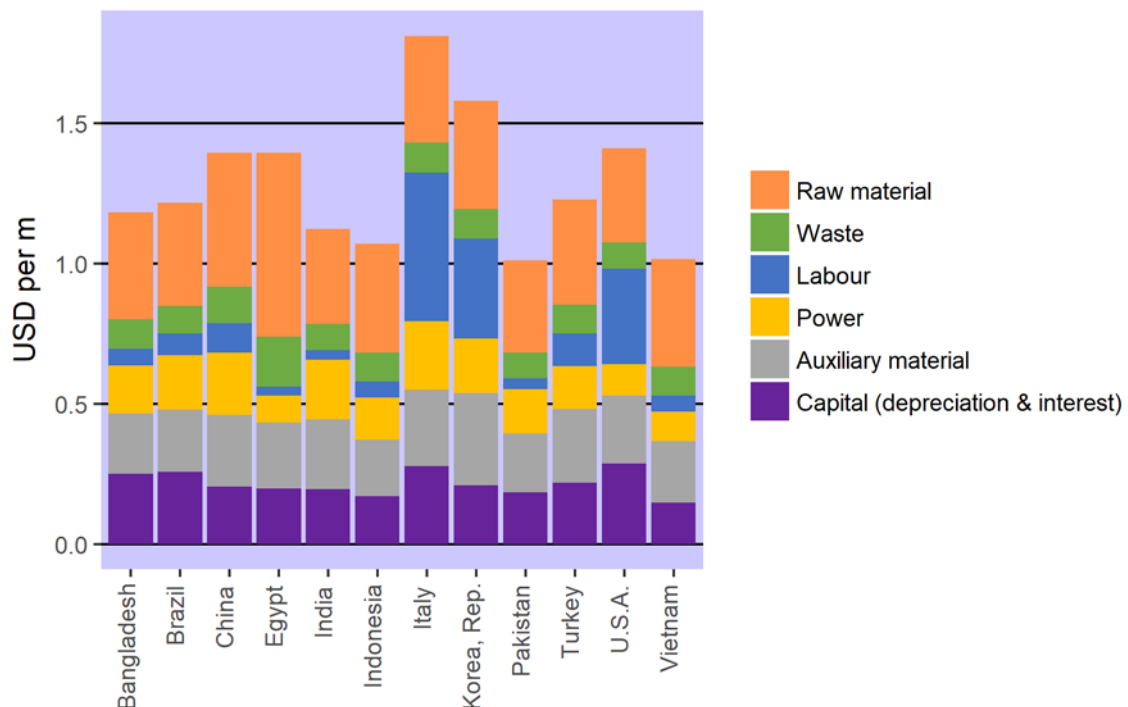
Total Cost 2018: Knitting Textured Yarn Fabric



Total Cost 2018: Finishing - Woven - Continuous Open Width

Product	Unit	Bangladesh	Brazil	China	Egypt	India	Indonesia	Italy	Korea, Rep.	Pakistan	Turkey	U.S.A.	Vietnam
Waste	USD per m	0.11	0.10	0.13	0.18	0.09	0.10	0.11	0.11	0.09	0.10	0.09	0.10
	% of Total	9%	8%	9%	13%	8%	10%	6%	7%	9%	8%	7%	10%
Labour	USD per m	0.06	0.08	0.11	0.03	0.03	0.06	0.53	0.36	0.04	0.12	0.34	0.06
	% of Total	5%	6%	8%	2%	3%	5%	29%	23%	4%	9%	24%	6%
Power	USD per m	0.17	0.19	0.22	0.10	0.21	0.15	0.25	0.19	0.16	0.15	0.11	0.11
	% of Total	14%	16%	16%	7%	19%	14%	14%	12%	16%	12%	8%	10%
Auxiliary material	USD per m	0.22	0.22	0.26	0.24	0.25	0.20	0.27	0.33	0.21	0.26	0.24	0.22
	% of Total	18%	18%	18%	17%	22%	19%	15%	21%	21%	22%	17%	21%
Capital	USD per m	0.25	0.26	0.20	0.20	0.20	0.17	0.28	0.21	0.18	0.22	0.29	0.15
	% of Total	21%	21%	15%	14%	17%	16%	15%	13%	18%	18%	20%	15%
Raw material	USD per m	0.38	0.37	0.48	0.66	0.34	0.39	0.38	0.39	0.33	0.38	0.34	0.38
	% of Total	32%	30%	34%	47%	30%	36%	21%	24%	33%	31%	24%	38%
Total	USD per m	1.18	1.22	1.39	1.39	1.12	1.07	1.81	1.58	1.01	1.23	1.41	1.02
	% of Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Index: Italy		65	67	77	77	62	59	100	87	56	68	78	56

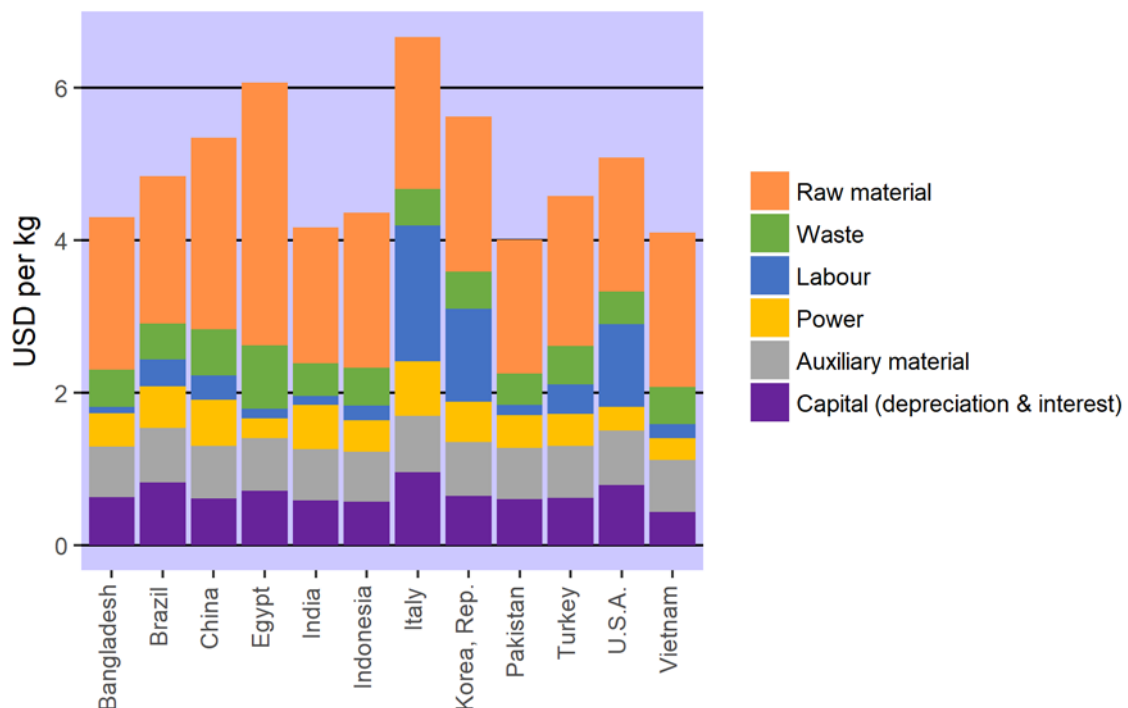
Total Cost 2018: Finishing - Woven - Continuous Open Width



Total Cost 2018: Finishing - Knit - Continuous Open Width (COW)

Product	Unit	Bangladesh	Brazil	China	Egypt	India	Indonesia	Italy	Korea, Rep.	Pakistan	Turkey	U.S.A.	Vietnam
Waste	USD per kg	0.48	0.47	0.61	0.83	0.43	0.49	0.48	0.49	0.41	0.50	0.42	0.49
	% of Total	11%	10%	11%	14%	10%	11%	7%	9%	10%	11%	8%	12%
Labour	USD per kg	0.08	0.36	0.32	0.13	0.12	0.20	1.78	1.22	0.14	0.39	1.09	0.18
	% of Total	2%	7%	6%	2%	3%	5%	27%	22%	3%	9%	21%	4%
Power	USD per kg	0.44	0.54	0.60	0.26	0.58	0.41	0.72	0.53	0.43	0.42	0.30	0.29
	% of Total	10%	11%	11%	4%	14%	9%	11%	9%	11%	9%	6%	7%
Auxiliary material	USD per kg	0.66	0.72	0.69	0.69	0.67	0.66	0.74	0.71	0.67	0.68	0.72	0.68
	% of Total	15%	15%	13%	11%	16%	15%	11%	13%	17%	15%	14%	17%
Capital	USD per kg	0.62	0.82	0.61	0.71	0.59	0.57	0.95	0.64	0.60	0.62	0.79	0.43
	% of Total	15%	17%	11%	12%	14%	13%	14%	11%	15%	13%	16%	11%
Raw material	USD per kg	2.00	1.93	2.51	3.45	1.78	2.03	1.99	2.03	1.75	1.98	1.76	2.02
	% of Total	47%	40%	47%	57%	43%	47%	30%	36%	44%	43%	35%	49%
Total	USD per kg	4.30	4.84	5.35	6.07	4.17	4.36	6.67	5.62	4.01	4.58	5.09	4.10
	% of Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Index: Italy		65	73	80	91	62	65	100	84	60	69	76	61

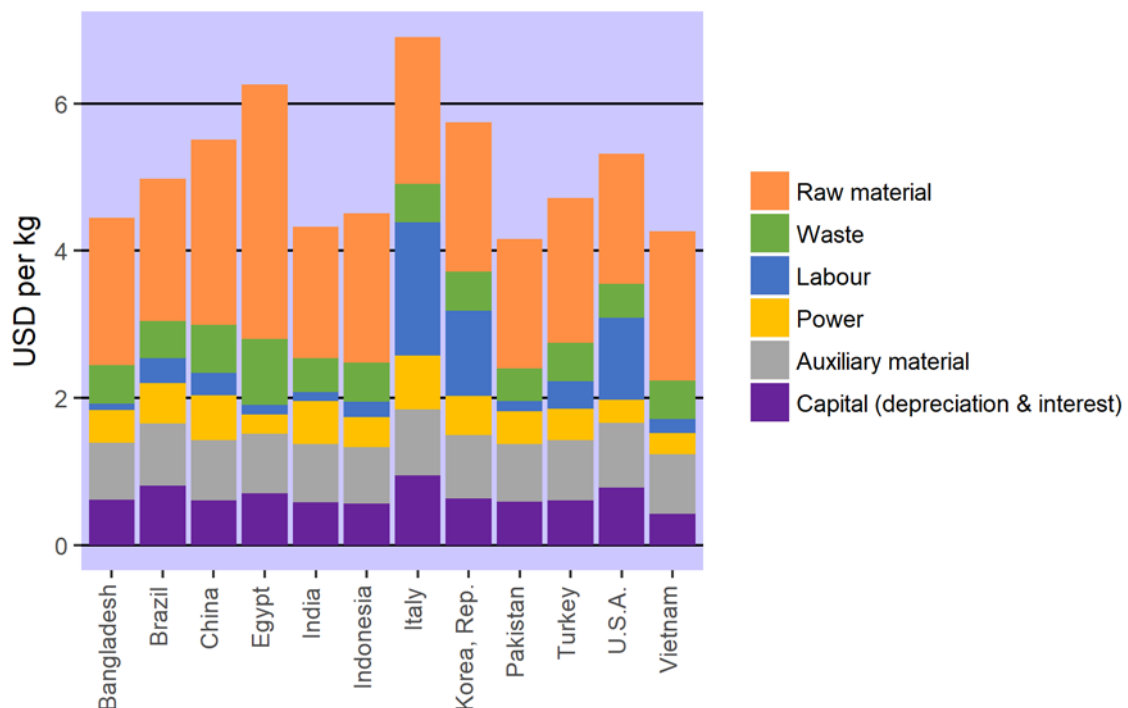
Total Cost 2018: Finishing - Knit - Continuous Open Width (COW)



Total Cost 2018: Finishing - Knit - Discontinuous (JET)

Product	Unit	Bangladesh	Brazil	China	Egypt	India	Indonesia	Italy	Korea, Rep.	Pakistan	Turkey	U.S.A.	Vietnam
Waste	USD per kg	0.52	0.50	0.66	0.90	0.46	0.53	0.52	0.53	0.45	0.52	0.46	0.53
	% of Total	12%	10%	12%	14%	11%	12%	8%	9%	11%	11%	9%	12%
Labour	USD per kg	0.09	0.34	0.31	0.13	0.12	0.21	1.82	1.15	0.14	0.38	1.12	0.19
	% of Total	2%	7%	6%	2%	3%	5%	26%	20%	3%	8%	21%	4%
Power	USD per kg	0.45	0.55	0.61	0.26	0.58	0.41	0.72	0.53	0.44	0.43	0.32	0.29
	% of Total	10%	11%	11%	4%	13%	9%	10%	9%	11%	9%	6%	7%
Auxiliary material	USD per kg	0.78	0.85	0.82	0.81	0.79	0.77	0.90	0.86	0.78	0.82	0.88	0.81
	% of Total	17%	17%	15%	13%	18%	17%	13%	15%	19%	17%	17%	19%
Capital	USD per kg	0.62	0.81	0.60	0.70	0.58	0.56	0.94	0.63	0.59	0.61	0.78	0.43
	% of Total	14%	16%	11%	11%	13%	12%	14%	11%	14%	13%	15%	10%
Raw material	USD per kg	2.00	1.93	2.51	3.45	1.78	2.03	1.99	2.03	1.75	1.98	1.76	2.02
	% of Total	45%	39%	46%	55%	41%	45%	29%	35%	42%	42%	33%	47%
Total	USD per kg	4.45	4.98	5.51	6.26	4.32	4.51	6.90	5.74	4.16	4.72	5.31	4.26
	% of Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Index: Italy		64	72	80	91	63	65	100	83	60	68	77	62

Total Cost 2018: Finishing - Knit - Discontinuous (JET)



Annex

How to calculate company-specific depreciation and interest costs

The separate presentation in this study of depreciation and interest costs makes it possible to calculate company-specific capital costs. Note that the share of machinery in total depreciation in spinning varies from 85% - 95% in the different countries and that for weaving from 80% - 90%, whereas the machinery part makes up more than 95% of total depreciation in knitting. For Finishing it varies between 80% - 91%. The remainder is for accessories and buildings.

Example: United States

Depreciation Costs (Machinery) - Weaving Ring Yarn

Share of machinery in total depreciation:	0.85
Assumed depreciation period (see page 11):	7 years
Depreciation costs (machinery) per meter of fabric (see page 22):	85% of USD 0.087 = USD 0.074
Company-specific depreciation period:	10 years
Company-specific depreciation costs (machinery) per meter of fabric:	USD 0.074 x 7 / 10 = USD 0.052

Interest Costs - Weaving Ring Yarn

Assumed interest rate (see page 11):	6%
Interest costs per meter of fabric (see page 22):	USD 0.027
Company-specific interest rate:	0.09
Company-specific interest costs per meter of fabric:	USD 0.027 x 9 / 6 = USD 0.041