
Offshoring: Where Should KindyBis Make Its Socks?

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KindyBis⁵ is a French SME with annual sales of roughly €10 million. It produces socks for both children and adults, offering high-quality products ranging from sports to dress socks. The high quality of its socks in terms of both materials and stitching have enabled KindyBis to maintain its position in the European hosiery market, its products are sold by Europe's major retailers. The company's market includes the Iberian Peninsula (20% of sales), France (30%), Benelux (15%), Germany and Austria (15%), and Italy (20%). Although sales have decreased in recent years, the company hopes to increase its profit margin without compromising either quality or product image. Its senior managers have considered moving production overseas, but opinions vary regarding what form such offshoring should take. To limit the risk, some would like to outsource only part of the production process, while others favour a more radical solution, moving the entire plant overseas. Faced with these options, KindyBis is seeking tools and methods to help it chart its course.

While its sales have declined, KindyBis is still a major French hosiery manufacturer. It has achieved this feat despite strong international competition by having its R&D department implement recommendations emerging from its marketing studies. As a result, KindyBis products have improved considerably, with special fibres providing better air circulation and elasticity.

Production

KindyBis operates just one 20,000 m² plant, located at its head office in Beauvais, north of Paris. This plant produces 5 million pairs of socks annually with average daily production of 4,348 batches, at five pairs per batch. The plant employs 250, with a 230-day work year.

¹ Translation from the French of case #9 00 2017 001 "Délocalisation internationale : où KindyBis devrait-elle produire ses chaussettes?"

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⁵ Kindybis is a fictitious company, but the case is inspired by Kindy, a real company.

KindyBis's procurement of raw materials meets fair trade standards, and the company deals only with European suppliers. Its innovative production process was designed to minimize environmental impact and water consumption.

Market constraints

The textile industry is undergoing an upheaval in some developed countries. Asian competition, particularly following the end of import quotas in the 1990s and 2000s, has sparked fierce international competition. Production costs are high in western countries compared to those in Asia, the Maghreb, and Eastern Europe, yet prices are fairly low. To survive, firms must decrease their production, logistics, and administration costs. This is why many western firms are looking to offshore production.

Despite sluggish economic conditions, 400 million pairs of socks are sold in France each year, suggesting that KindyBis could increase market share if it became more competitive, especially in terms of price.

KindyBis is also positioning itself as an online seller, having created a website for the KindyBis brand along with the number one website in France devoted to the sale of socks: www.voschaussettes.fr (yoursocks.fr).

Distribution constraints

Cost management alone will not ensure survival, however: retaining distributors is crucial. KindyBis's European distributors are international giants: Carrefour is the world's second-largest retailer after Wal-Mart; Tesco is the third largest; and Décathlon is France's leading sportswear retailer. To minimize inventory, the firm's distributors use the just-in-time inventory system and require short delivery times.

KindyBis distributes most of its products to five distribution centres in Paris, Zaragoza, Milan, Munich, and Rotterdam (see table 1). KindyBis manages deliveries by professional carriers to the five distribution centres as indicated below. Truck capacity is not crucial since socks don't weigh much. A 40-ton European truck has a load capacity of 25 tons.

Table 1: KindyBis distribution centres

	France	Spain	Italy	Germany	Netherlands
	Paris	Zaragoza	Milan	Munich	Rotterdam
Percentage of production	30%	20%	20%	15%	15%
Batches per year	300,000	200,000	200,000	150,000	150,000
Batches per shipment	5,769	7,692	7,692	7,143	7,143
Number of shipments	52	26	26	21	21
Delivery conditions (maximum time)	1 week	2 weeks	2 weeks	2.5 weeks	2.5 weeks

Suppliers

With regard to suppliers of raw materials, we know only this:

- Suppliers are responsible for transporting raw materials to the plant.
- Cotton (80% of the finished product) is supplied by a French manufacturer of high-quality, fair-trade certified cotton.
- Elastane (1%) is supplied by a reputable French firm with which it has had a lengthy business relationship.
- Polyamide (19%) comes from a Spanish supplier with which it began doing business only recently. Its deliveries have always been on time and of excellent quality.

The offshoring project

KindyBis faces increasing financial challenges. Although its products sell well, growth seems unattainable, with customers seeming to prioritize low prices over quality. Two years earlier, the company had responded to this situation by launching a low-cost, entry-level line of socks. Just one year later, KindyBis withdrew these products, deciding to streamline operations by focusing on the firm's core business: high-end socks.

Despite this clear strategic orientation, KindyBis's financial statements showed little improvement. At the last shareholder meeting, the financial director announced that the company would try to increase its profit margin by lowering production costs. Representatives of the French labour unions declared that they were doing everything possible and threatened to strike.

While not yet ready to commit to offshoring, KindyBis commissioned a preliminary analysis of possible sites based on three major criteria laid out in its strategic guidelines. First, the plant had to be located in or near continental Europe to facilitate road freight transport. KindyBis has many years' experience managing road transport but has not yet developed expertise with other modes of transport. Another consideration was proximity to distribution markets. Major distributors insist on relatively short delivery times and will no doubt tighten these requirements in the coming years. Finally, KindyBis sought a country where the textile industry already had a strong structural base, allowing it to operate at full capacity. Based on these criteria, three countries were selected: Portugal, Poland, and Turkey. In each of these countries, an industrial suburb was identified based on the company's needs in terms of size (minimum 30,000 m²), proximity to road transport hubs, and economic importance of the textile industry: those of Krakow (Poland), Istanbul (Turkey), and Lisbon (Portugal). Exhibit 1 shows a compendium of factors related to the countries selected as possible locations.

KindyBis recently decided to make a second attempt to launch a new line of low-end socks. The marketing director believed that offshoring would ensure the viability of this strategy since the failure of the first attempt had been attributed to the cost structure of the Beauvais plant. This view was supported by an analysis done by the company's financial controllers. The marketing director was also convinced that production of the new line of socks should be fully outsourced. He therefore asked the purchasing director to find international suppliers able to meet the company's needs. Exhibit 2 shows the preliminary analysis done for this purpose.

The offshoring question was complex. KindyBis had to decide where to manufacture both its high- and its low-end product lines and whether to continue to manufacture the socks itself or have them made by international suppliers. Moreover, these decisions had to be compatible with the company's long-term objectives and justifiable to stakeholders (employees, unions, government, and local suppliers).

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Exhibit 1

Compendium of factors related to countries selected as possible locations¹

Cost of manual labour²

Labour cost	Gross monthly minimum wage (2011)	Number of employees	Monthly labour cost	Annual labour cost
France	€1,365.00	250	€341,250	€4,095,000
Portugal	€65.83		€41,458	€1,697,490
Poland	€348.68		€87,170	€1,046,040
Turkey	€384.89		€96,223	€1,154,670

Annual transport costs

	France	Spain	Italy	Germany	Netherlands	Total annual transport costs
	Paris	Zaragoza	Milan	Munich	Rotterdam	
Beauvais	€15,883.71	€6,834.23	€46,689.24	€35,040.96	€18,727.72	€173,175.86
Lisbon	€166,232.20	€47,044.82	€101,201.15	€93,836.61	€33,578.03	€491,892.80
Krakow	€144,091.06	€116,850.08	€64,774.29	€36,172.65	€48,348.24	€410,236.33
Istanbul	€259,859.44	€152,321.42	€6,452.49	€74,469.68	€102,905.78	€686,008.80

Telecommunications costs

The table below shows the 2010 telecommunication cost index in relation to figures from 2005.³

Portugal	92.45
Poland	97.40
Turkey	106.32

Energy costs

Here is the energy cost index, also in relation to figures from 2005, for the three countries concerned.⁴

Portugal	125.12
Poland	137.80
Turkey	175.20

¹ The data gathered from the Eurostat website date back to 2010-2011; they have changed since then.

² Eurostat: http://ec.europa.eu/eurostat/statistics-explained/index.php/Minimum_wage_statistics

³ Eurostat: http://ec.europa.eu/eurostat/statistics-explained/index.php/Archive:Telecommunication_statistics

⁴ Eurostat: http://ec.europa.eu/eurostat/statistics-explained/index.php/Energy_price_statistics

Corporate income taxes

	Corporate taxes ¹
Portugal	25%
Poland	19%
Turkey	20%

This table shows the corporate tax rate in the three countries. The figures were taken from Wikipedia and the site of the European Commission.

Climate

The following table indicates the sunshine hours as shown in the climate section of the Wikipedia page for each city.

	Climate
Portugal	2,806
Poland	1,469
Turkey	2,470

Crime

	Number of crimes	Population	Ratio
Portugal	430,534	10,617,575	0.041
Poland	1,082 057	38,115,641	0.028
Turkey	986,319	70,586,256	0.014

The crime rate is based on the population of the country divided by the number of crimes as provided by Eurostat, the statistical office of the European Union.²

Cost of living

Cost of living is based on the price index for each country provided by the Organisation for Economic Cooperation and Development (OECD³), giving Portugal a base value of 100 for comparison purposes.

Portugal	100
Poland	69
Turkey	66

¹ Wikipedia (taxes in Europe – corporate income tax): http://fr.wikipedia.org/wiki/Fiscalit%C3%A9_en_Europe#Imp.C3.B4t_sur_les_soci.C3.A9t.C3.A9s
European Commission: http://ec.europa.eu/youreurope/business/managing-business/paying-taxes/poland/index_en.htm
Wikipedia (Tax rates around the world): http://en.wikipedia.org/wiki/Tax_rates_around_the_world

² Eurostat: http://ec.europa.eu/eurostat/statistics-explained/index.php/Archive:Crime_statistics

³ OECD: <http://stats.oecd.org/index.aspx?lang=en>

Proximity of head office

The following table, created from simulated data on the ViaMichelin site, shows the distance in kilometres and travel time between the possible sites and head office.

	Head office		
Lisbon	1,831	17 hours, 32 min	17.5
Krakov	1,549	13 hours, 58 min	14
Turkey	2,768	27 hours, 27 min	27.5
	Distance	Travel time	Travel time
	(km)	(hours)	(0.25 hours = 15 min)

Proximity to customers

The following table, based on simulated data on the ViaMichelin site, shows the distance between the different sites and the distribution centres.

Round-trip distance		France	Spain	Italy	Germany	Netherlands
(km)		Paris	Zaragoza	Milan	Munich	Rotterdam
France	Beauvais	158	2,324	1,864	1,728	850
Portugal	Lisbon	3,506	1,890	4,300	4,902	4,396
Poland	Krakov	3,084	5,092	2,658	1,760	2,510
Turkey	Istanbul	5,520	6,488	3,988	3,818	5,406

Borders (customs)

Portugal and Poland are in the Schengen border-free zone. Turkey is not.

Economic, political, and structural risks

Economic, political, and structural risks can be evaluated using Euromoney indices showing the riskiness of financial investments¹.

	Economic risk index	Political risk index	Structural risk index
Poland	64.36	69.67	58.02
Portugal	42.14	64.31	61.36
Turkey	60.94	60.07	56.70

¹ EUROMONEY website, country risk index used in making financial investment decisions: http://www.euromoney.com/Article/2773235/Country-risk-March-2011-Country-rankings-and-acknowledgements.html#Thank_You

Natural risks

To estimate the natural risks associated with each option, it's useful to look at the natural disasters that have occurred in each of the three countries. The following tables summarize the natural disasters that have occurred in each country in the past thirty years.

Poland¹

Natural disasters from 1980 to 2010

Overview

No. of events:	37
No. of people killed:	1,693
Average killed per year:	55
No. of people affected:	370,666
Average affected per year:	11,957
Economic damage (US\$ X 1,000):	8,266,150
Economic damage per year (US\$ X 1,000):	266,650

Portugal²

Natural disasters from 1980 - 2010

Overview

No. of events:	29
No. of people killed:	2,933
Average killed per year:	95
No. of people affected:	157,052
Average affected per year:	5,066
Economic damage (US\$ X 1,000):	7,188,776
Economic damage per year (US\$ X 1,000):	231,896

Turkey³

Natural disasters from 1980 - 2010

Overview

No. of events:	97
No. of people killed:	21,964
Average killed per year:	709
No. of people affected:	7,730,453
Average affected per year:	249,369
Economic damage (US\$ X 1,000):	25,013,300
Economic damage per year (US\$ X 1,000):	806,881

¹ <http://www.preventionweb.net/english/countries/statistics/?cid=136>

² <http://www.preventionweb.net/english/countries/statistics/?cid=137>

³ <http://www.preventionweb.net/english/countries/statistics/?cid=177>

Exhibit 2

Summary table produced by KindyBis to evaluate potential suppliers

	Supplier 1 Poland	Supplier 2 Portugal	Supplier 3 Turkey
Purchase price per batch	0.42 Euros	0.69 Euros	0.47 Euros
Transport costs	See country compendium		
EU (border + currency)	Schengen	Schengen + euro	Neither
Political risks	See country compendium		
Structural risks	See country compendium		
Natural risks	See country compendium		
Quality (certifications)	No certification	ISO 9001	ISO 9001 in progress
Flexibility of production volume	Firm order every 3 weeks	Firm order every 2 weeks	Firm order every 2 weeks
Maturity of production system (ERP)	ERP (SAP)	ERP, Lean, TPS (Toyota Production System)	ERP (Odoo – Open ERP)
Compliance with lead times (reputation)	No data	Average	Excellent
IT (EDI)	No EDI (Electronic Data Interchange)	EDI in place	No EDI, but interested in developing it
Availability of financial reports	No	Yes, high debt ratio	Yes, ratios indicate good management
Openness to communication	No after-sale service, no one speaks French	After-sale service difficult to contact	After-sale service in English, marketing manager speaks French
Long-term perspective	No indication	Interested in a long-term relationship	Interested in a long-term relationship