MULTINATIONAL BUSINESS FINANCE

DECISION CASE

Crosswell International

It is August 4, 1995, and the Mathieux brothers, Doug and Geoff, are concluding a summer-long effort of developing the Brazilian market for Crosswell International (U.S.). Crosswell's president and CEO, Hector Lans, is convinced that *Precious Ultra Thin Baby Diapers* will be a big seller in Brazil. In their role as brokers for Crosswell, the Mathieuxs have been exploring a number of different distribution channels in the Brazilian market. To date, the distributor response to *Precious* diapers has been enthusiastic, particularly in light of *Precious diapers'* superior quality compared to locally manufactured alternatives. The problem, however, is the price.

Brazilians base many purchasing decisions—at least in regard to disposable diapers—on cost, not on quality. The Mathieuxs find that distributors do not believe they can compete in the market with the relatively high prices offered by Crosswell, even with higher-quality diapers. After much debate over how to improve the price competitiveness of *Precious* diapers, the Mathieuxs believe they may have found a solution. Their proposal is to combine extended credit terms to local distributors with Brazil's high domestic interest rates to effectively lower the diapers' price to Brazilian consumers.

The Brazilian Diaper Market

Until the latter part of the 1980s, most Brazilians had never heard of a disposable diaper, and not surprisingly, the disposable hygiene market in Brazil was virtually nonexistent. By 1995, however, the personal care market was booming. This growth was largely a result of newfound economic stability and a growing middle class. As both the middle class and educational levels about hygiene expand, the personal care market should also expand.

Disposable diapers were first introduced in Brazil in the mid-1980s by U.S.-based multinational Johnson & Johnson (J&J). As J&J promoted its new diapers, Brazilians discovered the advantages of disposable diapers and sales grew steadily in the small upperclass market segment. The diapers were initially very expensive; retailers sold them at a Brazilian currency equivalent price of $1.50–$2.00 per diaper (depending on size). J&J increased its diaper sales and in the mid-1980s set up manufacturing operations in São Paulo.

Eventually, J&J's large profit margins attracted competitors, so that by 1990 several other players had entered the game. Between 1990 and 1995 the market expanded dramatically, with U.S.-based Procter and Gamble (P&G) and several other major new entrants now manufacturing and distributing in Brazil. The good news for Crosswell is that these diapers are still largely inferior in quality to *Precious* due to technological and capital constraints on domestic producers.

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By early 1995 the Brazilian disposable diaper market was growing rapidly as the Brazilian middle class expanded and its purchasing power increased. Competition, however, quickly reduced profit margins as competitors began cutting prices. J&J's leadership position eroded as its market share dropped from 78% in 1990 to less than 15% in 1995. In an effort to keep its remaining market share, but maintain higher prices in an effort to recover its investment in local manufacturing facilities, J&J has spent freely to promote its premium product image. Exhibit 1 provides an overview of the major players, products, and prices in the Brazilian disposable diaper market in 1995.

The Competitors

There were four main groups of competitors in the diaper market in Brazil. The first group, comprised of foreign multinational corporations producing in Brazil included J&J, P&G, and Kenko do Brasil. These companies commanded 40% of the market. J&J had the highest-quality diaper produced in Brazil and commanded the highest prices. P&G was viewed as the most efficient manufacturer, producing the mid-quality *Pampers*. Kenko do Brasil, a Japanese company, entered Brazil by acquiring several local Brazilian diaper producers. The company's brands, *Monica* and *Tippy*, were popular and held a substantial portion of the market. Kenko's quality and price were similar to P&G's *Pampers*.

The second group of competitors consisted of Brazilian companies that produced in-country. These companies generally used simpler manufacturing techniques due to limited financial backing and served the lower-quality, lower-price market segment. Some brands, however, such as *Puppet* and *Julie Joy*, competed in the mid-price segment. These national brands had captured a 30% share of the market by 1995.

Exhibit 1 Baby Diaper Prices and Qualities in the Brazilian Market, 1995

			Prices per Diaper by Size			
Company (Country)	*Brand*	*Quality*	*Small*	*Medium*	*Large*	*No. in Package*
Bebito (ARG)	Bebito	Low	R$0.198	R$0.232	R$0.302	24/20/16
Panales Duffy (ARG)	Duffy	Low	0.204	0.230	0.312	24/20/16
Cora Products (BRZ)	Pipita Anatomica	Low	0.248	0.290	0.380	24/20/16
Pom Pom (BRZ)	Pom Pom	Low	0.244	0.289	0.415	12/10/8
Chansommes (BRZ)	Puppet	Mid	0.279	0.332	0.463	12/10/8
Julie Joy (BRZ)	Julie Joy	Mid	0.265	0.301	0.437	24/20/16
Kenko (JAP)	Monica Plus	Mid	0.273	0.340	0.469	24/20/16
Kenko (JAP)	Tippy	Mid	0.363	0.425	0.544	24/20/16
Procter and Gamble (USA)	Pampers Uni	Mid	0.261	0.317	0.429	24/20/16
Johnson & Johnson (USA)	Sempre Seca Plus	Mid to High	0.396	0.451	0.594	24/20/16
French, Italian, Israeli, Japanese, and U.S. firms	Various	High	Similar to Johnson & Johnson			Varies

Source: Authors, 1995. Average exchange rate of R$0.94/US$.

The third group of competitors consisted of Argentinian companies with brands such as *Duffy* and *Bebito.* These large diaper producers were taking advantage of the lower import tariffs resulting from the creation of *Mercosur* (as well as favorable exchange rates) by producing in Argentina and selling into Brazil.[1] The production costs of the Argentinians were low, and in the two years prior to 1995 they had captured a 20% market share in Brazil by offering low-quality, low-cost diapers.

The final group of competitors includes foreign companies from countries such as France, Italy, Israel, Japan, and the United States. These companies are entering the market with imports of high-quality diapers (at least higher in quality than the majority in the existing Brazilian market). However, they are priced at the high end of the market with prices close to those of J&J, and have garnered only a ten percent share to date. This is the market segment which Crosswell wanted.

Prices for large-size disposable baby diapers in Brazil range from R$0.30 to R$0.60 per diaper (R$ is the symbol for the Brazilian currency, the *Real*). Argentinian companies are at the low end of the range while J&J commands the highest prices.

In spite of the entry of more and more competitors and increasing production capacity, the Brazilian market was still seen as a high-growth market with excess demand. Brazilian President Fernando Henrique Cardoso's economic recovery plan, the *Real Plan,* is drastically restructuring the Brazilian economy and, in the opinion of most, for the better.[2] Consumers have gained confidence in the economy and consumer spending is rising. If the plan continues to be a success, the middle class will continue to grow in size and income, resulting in an expanding market for disposable diapers.

Hospital Specialty Company

Hospital Specialty Company (Hospeco) was the personal care products division of The Tranzonic Companies, a Cleveland, Ohio-based manufacturer and distributor of a wide variety of paper, cloth, and vinyl products. Tranzonic had sales of $131 million in 1994 and was listed on the American Stock Exchange (symbol TNZ). Appendix A provides a brief summary of Tranzonic's recent financial performance in the 1990s. Tranzonic was composed of four major operating divisions, the personal care division (Hospeco), the industrial textiles division, the housewares division, and the industrial packaging division. Hospeco was the largest operating unit within the company, manufacturing and distributing a full line of feminine hygiene products, infant's disposable diapers, adult incontinence products, obstetrical pads, toilet seat covers, and related disposable hygiene products. Hospeco brand names included SAFE & SOFT®, EVERYDAY®, SOFT & THIN®, MAXITHINS®, PRECIOUS®, HEALTH GARDS®, FRESH GARDS®, and AT

[1] *Mercosur* is a regional common market including Argentina, Brazil, Paraguay, and Uruguay. It was implemented on January 1, 1995. This trading agreement set common external tariffs for the four members while reducing trade barriers and import tariffs for trade within the common market.

[2] The *Real Plan,* an economic program combining a new currency with new economic stabilization measures, is described in detail in a following section.

EASE®. Production facilities were located in Cleveland, Ohio; Lexington, Kentucky; and Phoenix, Arizona.[3]

Although Hospeco faced margin pressures in 1994 (brand-product manufacturers had been reducing prices to draw market share from the private-label sector), the firm increased its sales and earnings over the 1995 fiscal year. In response to increased competition, the parent company made significant new investments to ensure cost-competitive manufacturing of high-quality products. The goal of Tranzonic and Hospeco was to develop and maintain the capacity to offer customers a broad line of products that were equivalent to international brands in terms of quality and performance. Hospeco proved itself adept at leveraging strong customer relationships and introducing new product lines. For example, its adult incontinence product lines and sales continued growing with the "graying of America" and the associated expansion of the elder-care market.

Hospeco and Crosswell International

Hospeco did not begin to explore market potential outside the United States until 1994. In 1993, Hospeco's president was approached by Hector Lans, a Cuban-born Miami-based businessman, who promised big results if he was allowed to direct a new international sales subsidiary, and given the resources to pursue large untapped international markets. Mr. Lans managed to convince Hospeco's directors of the international market potential—particularly in Latin America—for their line of personal care products, and Crosswell International was born. The subsidiary was placed in Miami, Florida, to focus specifically on Latin America.

By May 1995, in a little over 18 months, Hector Lans had begun developing several Latin American markets, with the glaring omission of Brazil. The lack of any real activity in the Brazilian market was largely a result of the language barrier—Brazil is primarily Portuguese-speaking—and a general lack of familiarity with the market. But Brazil offered enormous potential. Lans sought out two brothers, Doug and Geoff Mathieux, who possessed not only business experience in the Brazilian market, but, just as importantly, the language skills necessary to penetrate it (both were fluent in Spanish, French, and most importantly for Brazil, Portuguese). The Mathieux brothers agreed to act as brokers on behalf of Crosswell International in Brazil and focus on the development of the *Precious Ultra Thin Baby Diaper* product line.

Economic Situation in Brazil

The economic situation in Brazil improved dramatically after the implementation of President Cardoso's *Real Plan* on July 1, 1994. There were two key elements of the *Real Plan:* (1) the establishment of a new currency, the *Real (R$)*, and (2) a commitment to a tight monetary policy which would, once and for all, drive inflation from the Brazilian economic and social fabric. Success to date had been promising. Inflation dropped from a pre-plan level of 50% per month to 2% per month, and was expected to stay at that rate

[3] *The Tranzonic Companies, Annual Report,* 1994.

Exhibit 2

Brazilian Exchange and Money Rates, August 4, 1995

Real/US$ Exchange Rates	*Bid*	*Ask*
Commercial	0.9343	0.9357
Parallel	0.9070	0.9220
Tourist	0.9040	0.9270

Deposit Interest Rates	*Loan Interest Rates*
3.69% per month	30 days: 8.25% per month 60 days: 8.75% per month 90 days: 9.25% per month

Source: *Brasil FaxLetter,* Gilbert o L. DiPierro, August 4, 1995, Miami, Florida.

throughout 1995. The new currency, the *Real,* was stable against the dollar and the Brazilian government was committed to maintaining its value.

Interest rates were, however, still high at 3–4% per month (not per year) for corporate deposit rates, and 8% to 10% per month for loan rates, as a result of the tight monetary policy under the *Real Plan* (see Exhibit 2). These rates were expected to remain stable for the next several months, with hope that interest rates may slowly decline over the coming one to two years as inflationary pressures subsided. A continuing influx of foreign capital was also expected to aid in this process of stabilization as inflows would hopefully buoy the Real and prevent the currency itself from depreciating and adding to inflationary pressures.

The Brazilian trade balance enjoyed a modest monthly surplus after several months of deficits during the beginning of 1995. Thanks to a large capital account surplus, Brazil was able to increase its volume of foreign reserves to over US$45 billion.[4] Foreign investment once again began flowing into Brazil, indicating that the *Tequila Effect* was wearing off.[5]

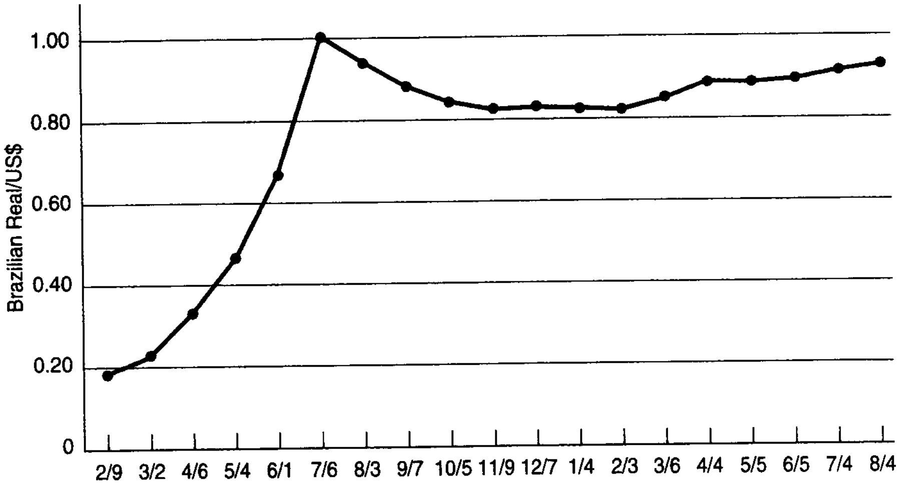
The stock market performed quite well during the last quarter, after several difficult months following Mexico's devaluation. These strong results were thought to be indicative of the new consumer and institutional confidence in the economy. After a year of strong growth, consumer spending and retail sales have leveled. Gross domestic product (GDP) growth was expected to reach 6.4% in 1995.

With the implementation of the Real Plan on June 30, 1994, the Brazilian *Cruzeiro (Cr$)* was replaced with the *Real (R$),* with the official exchange rate changing from

[4] *Brazil Outlook,* Number 9, September 1995, Editora Tama, Ltda., Rio de Janeiro, Brazil.

[5] The *Tequila Effect* refers to the spreading of negative economic impacts to all of Latin America's markets following the devaluation of the Mexican peso in December 1994. Although the devaluation was confined to Mexico alone, international investors withdrew from many Latin American markets in fear that the devaluation might spread. It took over half a year to soothe the anxieties of international investors regarding the stability of the other countries in the region.

Exhibit 3 Brazilian Real/U.S. Dollar Exchange Rate Under the Real Plan (Feb 1994–Aug 1995)



Note: The Real replaced the Cruzeiro as the Brazilian currency on June 30, 1994. The exchange rate on that date, Cr$2750/US$, is used to index the currency rate prior to June 30, resulting in the "falling value" of the Real from February to July 1994 illustrated here. For financial valuation purposes, the exchange rate prior to June 30, 1994, is not directly comparable to the rate in effect after revaluation.

approximately Crz2750/US$ to R$1.00/US$. Given the relatively high inflation rates experienced by Brazil after that time, the Real should have depreciated against the dollar—but it didn't. The influx of foreign investment became substantial, with benefits to the Real itself. In fact, as illustrated in Exhibit 3, the Real appreciated slightly during the first year after the plan, and remained stable through most of 1995.[6] Simultaneously, monthly deposit interest rates dropped precipitously under the Plan, stabilizing at three to four percent per month.[7] Given the apparent health of the economy, the positive trade balance, and a central bank which was adding significantly to its foreign exchange reserves, the outlook for maintaining the Real's value looked promising.

Developing the Brazilian Market

When the Mathieux brothers arrived in Brazil in May 1995, they conducted an in-depth analysis of the disposable diaper market. Their primary interest was to isolate what price they believed the market could sustain for Crosswell's *Precious*. The Mathieuxs then completed a detailed import and distribution price analysis for *Precious*. Pricing was

[6] The Brazilian government had actually intervened in the currency markets to keep the Real from appreciating further and making Brazilian exports increasingly expensive and uncompetitive on world markets.

[7] Monthly deposit rates averaged between 40% and 47% for the first six months of 1994, the period just prior to the *Real Plan*.

constructed in five stages (see Exhibit 4 for the detailed calculation), beginning with Crosswell's price to the Mathieuxs of $32.57 per case, and adding $1.50 per case commission for the Mathieuxs as brokers. The FOB price per case, Miami, was $34.07.[8]

Local freight, loading, documentation, and insurance expenses were incurred in the second stage, resulting in a CIF price to the distributor of $39.25 per case.[9] Although a number of larger firms were increasingly foregoing export insurance expenses—in this case 2.25% of CFR price—Doug and Geoff viewed the potential liabilities of a start-up business line such as this as too large, forcing them to incur the added expense. The price to the distributor was invoiced in U.S. dollars. Given the current spot rate of R$0.935/US$, this translated into a price of R$36.70 per case to the Brazilian distributor. The distributor would carry the currency risk, while the U.S. exporter (and broker in this case) were guaranteed their margins on the transfer price without risk of currency movements.

The third stage, the actual logistics of getting the diapers from Miami and through Brazilian customs to the local distributor, was not trivial in either cost or complexity. Given the various fees, tariffs, currency, and brokerage fees, the price in Brazilian Real rose rapidly from a CIF price of R$36.70 to R$40.44 per case, an added 10%.

The Brazilian distributor's role, the fourth stage in the pricing saga, added storage costs, inventory financing expenses, and distributor's margin. The price to retailers was now R$52.27 per case. In the fifth and final stage, the retailer paid industrial and merchandise taxes (15% and 18%, respectively), and added a customary 30% markup, resulting in a final price to the consumer of R$92.21. This was a price roughly 2.5 times the price of the diaper prior to hitting the docks of the Brazilian port. Brazilian *Precious* consumers would pay R$0.480 per large, and R$0.524 per extra-large baby diaper. This placed *Precious* in the upper third of the baby diaper price range in Brazil.

The brothers then proceeded to meet with importers, distributors, local representatives of chambers of commerce, and even trade representatives of the American Embassy offices in Brazil. Several useful contacts were established in trade shows in both Rio de Janeiro and São Paulo. Initial discussions with a number of potential distributors were encouraging as a number of distributors displayed strong interest in the diaper product line. Distributors were impressed with the quality of the product, acknowledging the superiority to that of locally manufactured brands.

The objection that the brothers ran into time and time again, however, was the price. Although all distributors were impressed by the quality, they insisted that *Precious* diapers could not effectively penetrate the Brazilian market at the proposed price (as developed in Exhibit 4). Although the Mathieuxs attempted to impress upon the distributors the changing structure of the Brazilian marketplace, and the opportunity they saw for a

[8] FOB, "free on board," is an international trade term in which the exporter's quoted price includes the cost of loading goods into transport vessels at a named point.

[9] CIF, cost, insurance, and freight, is the exporter's quoted price including the cost of packaging, freight or carriage, insurance premium, and other charges paid respecting the goods from the time of loading in the country of export to their arrival at the named port of destination or place of transshipment.

Exhibit 4

Precious Ultra-Thin Pricing

	Price/Case	*Rate*	*Applied*
Cases per container		968	
Price/case to Mathieux brothers (US$)	$32.57		
Commission (Mathieux)	1.50	1.50	US$ per case
FOB price per case (US$)	$34.07		
Freight, loading, & documentation	4.32	4180	$4180 per container
CFR price	$38.39		
Export insurance	0.86	2.250%	% of CFR
CIF/case to distributor (US$)	$39.25		
Exchange rate (R$/US$)	0.935	0.935	Average of bid/ask spread
CIF price/case to distributor (R$)	36.70		
Import duties (ID)	0.73	2.000%	% of CIF
Industrial product tax (IPI)	—	0.000%	% of CIF
Merchant marine renovation fee (MMRF)	1.01	25.00%	% of freight
Port storage	0.48	1.300%	% of CIF
Port handling fees	0.01	10.84	R$10.84 per container
Additional handling tax	0.10	20.000%	% of storage & handling
Indemnity for port employees	0.00	0.0407	R$0.0407 per container
Bank currency exchange fees	0.07	0.200%	% of CIF
Customs brokerage fees	0.73	2.000%	% of CIF
Tax on merc circulation services (ICMS)	—	0.000%	% of CIF+ID+IPT+MMRF
Import license	0.05	50.00	R$50.0 per container
Local transportation	0.55	1.500%	% of CIF
Total cost to distributor (R$)	40.44		
Storage cost	0.55	1.500%	% of CIF * months
Cost of financing diaper inventory	2.57	7.000%	% of CIF * months
Distributor's margin	8.71	20.000%	% of price+storage+cc
Price to retailer (R$)	52.27		
Industrial product tax (IPT-2)	7.84	15.000%	% of price to retailer
Tax on merc circulation services (ICMS-2)	10.82	18.000%	% of price+IPT2
Retailer costs and markup	21.28	30.000%	% of price+IPT2+ICMS2
Price per case to consumer (R$)	92.21		

Diaper Prices	*Bags of 8 per Case*	*Diapers per Case*	*Price to Consumer (R$/Diaper)*
Small	44	352	0.262
Medium	32	256	0.360
Large	24	192	0.480
Extra Large	22	176	0.524

high-end high-quality product at a premium price, distributors insisted that—at least at the time—success would only follow from a price which fell into the mid-priced segment of the diaper market. They also commented that "although the Americans saw the Real as stable, only time will convince us."

Material Hospitalar, Ltd.

In June 1995 the Mathieux brothers were referred to Leonardo Sousa by the local American Chamber of Commerce. Leonardo Sousa was the president of Material Hospitalar, a distributor of health care products with contacts in the hospital and disposable hygiene markets, and one of the largest distributors of hospital supplies in Brazil. Mr. Sousa expressed a strong interest in distributing *Precious* after a demonstration of their superior absorbency, and wished to proceed with the development of a business plan in which he would work with the Mathieuxs in importing and distributing Hospeco's baby diaper products on behalf of Crosswell International.

Mr. Sousa believed that the time was right to enter the baby diaper market, even though competition was intense. The market was currently experiencing growth rates of 25% a year, and he was confident that *Precious* could capture one-half percent of the potential baby diaper market in Brazil within a year. That represented imports of 15 containers a month with a value of almost $33,000 per container.[10] The Mathieux brothers provided Leonardo with a price list and outline of a potential representation agreement with payment and credit terms. Payment had to be made in cash in advance or with a confirmed, irrevocable documentary letter of credit with a sight draft. In return they requested financial statements, banking references, foreign commercial references, descriptions of regional sales forces, and sales forecasts. Mr. Sousa was interested in obtaining exclusive distributor rights to all of Brazil, and Crosswell was willing to grant it to the right distributor.

Negotiations between Leonardo Sousa and the Mathieux brothers progressed. Numerous meetings were held throughout the summer of 1995. The brothers visited Material Hospitalar's warehouse in Rio and met three of Leonardo's business associates. They were impressed. The only remaining issue was price. Sousa and his associates insisted that the FOB Miami price offered to Material Hospitalar was prohibitively high, and would prevent successful market penetration. Sousa was not willing to take the chance of entry failure due to the high price.

Like other distributors, Sousa explained that thrifty Brazilians would not purchase unknown, expensive diapers even if they were higher quality. He wanted Crosswell to cut its diaper prices and fund an advertising campaign to promote the *Precious* name. When the Mathieuxs approached Hector Lans about obtaining funding for promotional efforts, they were told that given Tranzonic/Hospeco's recent financial performance, an ad campaign was out of the question. More specifically, Hector Lans had a limited budget and his superiors at Hospeco were pressuring him to show results for the expendi-

[10] Each container held 968 cases of diapers and each case cost $34.07 to Leonardo Sousa (968 * $34.07 = $32,980).

tures related to the establishment of Crosswell. The Mathieuxs concluded that a lower price was the only way to reach an agreement with Sousa. "Once the *Precious* brand is known," he explained, "then you will be able to raise the price of the diaper. But remember, time is of the essence."

Sousa believed that Crosswell's price would have to drop by ten percent or more—the large-size diaper needed to be priced at the consumer level at about R$0.43 to R$0.44 per diaper. This would place *Precious* in direct competition with the Brazilian-owned domestic producers, the *Chansommes* and *Julie Joy* brands. Sousa felt that the market shares held by these firms were particularly vulnerable given their inferior quality to that of *Precious.*

As a result, the brothers renewed negotiations with Hector Lans in Miami, explaining that a lower FOB price was necessary for successful market penetration. One suggestion made by the Mathieuxs was for Hospital Specialty to manufacture a cheaper, lower-quality diaper which could more easily fit into the target price range. Although Hector agreed to a small discount—down to $32.07 per case (before commission)—he insisted that Hospeco would not change its manufacturing process for sales to Brazil. The Mathieuxs agreed to cut their commission to three percent ($1 per case). Unfortunately, these changes still only dropped the price to R$89.87 per case, when it needed—in the eyes of Leonardo Sousa—to reach R$83 per case. The Mathieuxs still needed to cut about R$7 out of the price.

Exploring Alternatives

The Mathieuxs were determined to find a solution to the impasse. They knew that they could not reduce their price further without shrinking their commission to unacceptable levels, and even that would not be enough. One potential solution for substantial gains was to find a way to reduce the financing costs of Material Hospitalar. This would enable Sousa to increase his margins and pass the savings on to the retailers.

They. first looked into the Foreign Credit Insurance Association (FCIA) and the US Eximbank (Export-Import Bank). They knew that these organizations existed to encourage and facilitate exports from the United States by providing loan guarantees to help finance trade. But the brothers needed to start moving goods immediately. The conditions for entry into the personal care market in Brazil were excellent. Sales were growing and the brothers had identified an excellent potential distributor who was ready to attack the market with Hospeco's premium diapers. These organizations required time to evaluate the loan and verify the background of the companies involved. Obtaining loan guarantees from the FCIA or Eximbank would take too much time (a minimum of three months), and a mountain of paperwork. This was particularly true for a small Brazilian distributorship that had never imported from the United States. Moreover, Crosswell International was unfamiliar with the loan guarantee programs. The Mathieuxs decided that this option was only viable for the long run. Once Crosswell and Material Hospitalar had successfully established the business line, they could consider this as an option for import/export financing.

Another possibility that the Mathieux brothers considered was importing through Uruguay. The import tariffs there were about half as high as Brazilian tariffs. A distributor could import goods into Uruguay, pay the lower import tariffs, and truck the goods into Brazil. Additional tariffs at the Brazilian border would be minimal, thanks to the *Mercosur* regional trade agreement. This option offered the possibility of reduced prices in Brazil but would be very time-consuming, and would require the Mathieuxs to establish an intermediary distributor in Uruguay itself. This would involve either finding an importer or distributor in Uruguay or investing capital there to create an import/export corporation. The latter option did not fit Crosswell's strategy, while the former could take a few months of research and negotiation in Uruguay. Importing through Uruguay would also slow the flow of goods into Brazil, as trucking goods from Montevideo to Rio de Janeiro would add an additional two weeks to delivery time. To add to the list, Leonardo Sousa was adamantly against this option because he did not want to lose control of the flow of goods. In addition, some of the gains earned through lower import tariffs would be offset by the higher financing costs (due to the longer delivery time) and inland transportation costs. Finally, this option would be resented by the Brazilian government which would effectively lose tariff revenues due to the "round-tripping" of Crosswell's goods. The proposal did not look promising.

A third alternative was suggested by Sousa himself. Brazilian regulations required all imports to be pre-approved via an import license. To obtain the license, importers had to present a pro forma invoice to the appropriate regulatory agency. It was common practice for exporters to under-invoice merchandise on pro forma invoices to Brazil, and therefore pay significantly lower import tariffs. An importer might typically pay for 50% of the purchase price in cash up front (the payment being made to a bank account somewhere outside of Brazil such as Miami). The remaining 50% would be paid with a letter of credit, upon which the tariff charges would be levied. And because the layers of tariffs in Brazil were compounded, under-invoicing resulted in substantial savings to the importer. The amount that was saved could then be passed on to the consumer in the form of lower prices. Tranzonic was a publicly traded firm, and under-invoicing for tax evasion purposes in Brazil would violate U.S.-SEC regulations. Under-invoicing was clearly not a justifiable option from either an ethical or legal standpoint.

Interest Rate Differentials

During a business lunch with the owner of an import-export firm in Rio de Janeiro, the Mathieuxs learned that foreign corporations (i.e., European automobile manufacturers and Chinese textile firms) were successfully undercutting national companies' prices by taking advantage of Brazil's high interest rates. Borrowing rates in the U.S. were substantially lower than deposit rates in Brazil, and given the stable exchange rate, this created an opportunity for uncovered interest rate arbitrage gains.

The basic strategy was premised on the ability to get extended terms from the seller (Crosswell International) and get paid for the goods quickly from the local Brazilian distributor (Leonardo Sousa). If Material Hospitalar could obtain 180-day credit terms, or a standard 180-day letter of credit from Crosswell, the firm could sell the goods into the local market for cash within 30 days of receiving the diapers at port. The cash proceeds from the resale could then be invested in the relatively "high-yielding" Real-denominated deposit rates. At the end of the following four to five months when the payment on the goods to Crosswell was due, the deposits could be closed and the profits taken to offset the cost of financing the purchase. This would reduce the R$2.57 per case financing cost of the distributor as described in the baseline analysis in Exhibit 4. Of course, this was only true if the Real/dollar exchange rate was stable over the period.

The Mathieux brothers were well aware that these interest rate differentials could not persist over the long run. Eventually, interest rates in Brazil would fall (assuming inflation was not reignited). However, in the short run, many international firms were taking advantage of the situation to lower their effective prices and gain market share in Brazil. The Mathieux brothers returned to the U.S. intent on exploring payment methods and financing with Crosswell.

Methods of Payment

A contract between an importer and exporter specifies a number of critical transaction details, including the method of payment.[11] There are four methods by which an exporter can sell to a foreign buyer: (1) advanced payment or prepayment; (2) documentary collections; (3) letter of credit (L/C); and (4) open account. The critical differences in the methods primarily involved who assumes the commercial risk and who provides the financing, the importer or exporter.

1. **Advanced payment.** If the importer pays for the goods up front, *prepayment,* the importer assumes all of the risks of nonperformance on the part of the seller. Because the buyer is paying for the goods prior to shipment, the buyer is financing the transaction. This is essentially a cash payment for goods like that of a retail sale.
2. **Documentary collection.** A documentary collection means that payment is due from the buyer upon presentation of certain documents (and explicitly not necessarily upon receipt of the actual goods). Also termed *collection of drafts,* the exporter issues an order to the importer for payment. This order, the *draft,* may require payment upon demand, a *sight draft,* or may require payment within a set number of days, a *time draft.*[12] A time draft therefore allows a delay in payment by the buyer, and is a form of financing provided by the exporter.[13]

[11] The common items in a sales contract include description of merchandise, specifying standards, grade or quality; exact quantity in units, specific weight, or volume; unit price expressed in a specified currency for payment; trade terms expressed as FOB or CIF, naming of specific ports of exit and entry, individual liabilities associated with individual costs and risks; packing; identifying markings; extent of insurance coverage and who is to provide it; shipping instructions including method of transportation and consignment, the documents required for shipping, and timing; type of payment method used (e.g., L/C).

[12] There are two major varieties of time drafts, the *bill of lading draft* and the *fixed maturity draft.* A *bill of lading draft* requires that payment be made a fixed number of days after the bill of lading date. The *fixed maturity draft* requires payment on a date specified in the draft.

[13] When a time draft is presented to the importer, the buyer stamps a notice of *acceptance* on its face. Once "accepted," it becomes a promise to pay a specified amount of money on a future date like a note or bond. If the draft is drawn upon and accepted by a bank, it becomes a "banker's acceptance."

Another subcategory of documentary collection is whether the draft is *clean* or *documentary*. A *clean draft* is very simple and straightforward: the control of the merchandise is turned over to the buyer regardless of the importer's payment or acceptance, very similar to an open account transaction. Multinational firms shipping merchandise to their own foreign affiliates often use clean drafts to effect payment (they trust their own affiliates to make timely payment). A *documentary draft* requires that a number of other shipping documents be attached to the draft, and the buyer must either make payment (sight draft) or acceptance (time draft) in order to obtain possession of the documents needed to take possession of the goods. There is obviously a little less trust involved in a documentary draft transaction.

3. **Documentary letter of credit.** A letter of credit (L/C) is a type of guarantee of payment provided by a bank upon the buyer's request. The issuing bank promises to pay the seller, the exporter, upon presentation of key documents specified in the terms of the credit. The promise to pay by the bank reduces the commercial risk to the exporter. The letter of credit may be confirmed or unconfirmed by the exporter's bank, depending on the contract between importer and exporter. A letter of credit is in many ways a documentary draft with the added safeguard of a bank's guarantee of payment. Although on the surface the cycle appears complex, the process simply involves the exchange of documents and money through intermediaries—normally commercial banks.
4. **Open account.** This is the form of most domestic business transactions where goods are shipped by the seller and a bill or invoice issued requesting payment within a set number of days. Credit terms associated with an open account method of payment may state a discount if paid within a set number of days and the final date on which payment is due (for example a 2% discount if paid within 10 days, with the payment due no later than 30 days, termed "2/10 net 30"). Credit terms internationally vary considerably across borders, and often reflect traditional business habits within a country-market.

The Proposal

The decision was made to use extended financing as the main selling point to bring Leonardo Sousa on board. The task facing the Mathieuxs was to be clear, yet convincing, when describing the potential benefits and associated risks of their proposed solution. Leonardo Sousa must understand that the success of the strategy was dependent on a stable Real/dollar exchange rate, and his ability to collect as quickly as possible for the diapers. Any significant depreciation of the Real against the dollar would increase the size of Material Hospitalar's obligations to Crosswell, as well as threaten the competitiveness of *Precious* diapers in the Brazilian market.

Doug and Geoff reviewed the financial cycle involved in exporting to Brazil with a 180-day letter of credit.[14] Crosswell would—at least for the first year—require a con-

[14] Crosswell International could currently borrow short term in the U.S. dollar market at the following rates: 30 days—8.40%, 60 days—8.44%, 90 days—8.50%, 120 days—8.51%, 180 days—8.60% (all rates per annum).

5 Proposed Process of Financing with the Letter of Credit

Aug 1	Importer requests a price from Crosswell
Aug 2	Crosswell responds, via fax, with an FOB price Miami of $34.07
Aug 5	Importer agrees to terms and faxes a purchase order to Crosswell
Aug 6	Crosswell faxes a pro forma invoice to the importer agreeing to price and terms
Aug 7	Importer makes an application to its bank for a letter of credit (L/C)
Aug 8	Importer's bank issues L/C and sends advice to Crosswell's bank in Miami that a L/C has been opened in its behalf, with instruction as to what documents are required for payment under the L/C. The L/C guarantees payment in U.S. dollars in 180 days upon presentation of specified documents. (The distributor could also request 30- 60- 90- or 120-day credit terms, depending on what is negotiated with Crosswell International at the time of the sale.)
Aug 9	Crosswell's bank confirms the L/C
Aug 12	Crosswell turns the goods over to a freight forwarder for shipment and consigns the goods to the order of the shipper. (Crosswell keeps large stocks of diapers in its warehouse so that orders can be shipped immediately upon request.) Crosswell prefers to be paid up-front rather than wait 180 days for the total amount. It is standard for the company to add any discount fee to the total amount appearing on the importer's invoice.
Aug 13	Shipping company issues the bill of lading. Crosswell issues a time draft in the name of its bank (since its bank confirmed the L/C) and presents documents to the bank. Crosswell's bank "accepts" the time draft, creating a *banker's acceptance.* Crosswell can at this point choose to wait to be paid in 180 days, or present the 180-day letter of credit to its bank for payment now. If requesting payment now, the company receives the stated amount less a discount fee set by its bank. The discount rate is equal to the company's short-term borrowing rate in the U.S. on August 4, 1995. The rates vary according to the number of days in the terms of the letter of credit.
Aug 14	The documents are forwarded from the exporter's bank to the importer's bank
Sept 6	Importer receives the goods
Sept 10	Importer sells goods to retailer and is paid cash by the retailer. Importer deposits amount due to Crosswell in a savings account for five months.
Feb 10	Importer pays the Brazilian bank, which then pays Crosswell's bank (180 days after shipment of the goods).

firmed letter of credit from the Brazilian's bank in U.S. dollars. The cycle they were currently analyzing was for an order placed August 4, 1995, by Leonardo Sousa. Exhibit 5 details the steps involved if Leonardo Sousa placed the order. Unfortunately, there were no foreign currency futures or forwards available to hedge dollar-denominated accounts payable in the event that the Real did begin to depreciate.[15] The Mathieux brothers grew silent as they both wondered if their proposal would fly.

[15] The Chicago Mercantile Exchange was currently studying the possibility of trading a Brazilian Real/U.S. dollar futures contract, but it was as yet unavailable.

Case Questions

1. What actions would you recommend to Crosswell and to Leonardo Sousa that would enable them to hit the target of R$83.00 per case of diapers?
2. What are the benefits and risks to Mr. Sousa if he uses a U.S. dollar-denominated 180-day letter of credit to finance the import of 15 containers of *Precious Ultra Thin Baby Diapers?* What are the potential benefits and risks to Crosswell?
3. How much added profit can Mr. Sousa earn from taking advantage of the 180-day letter of credit? (Use the sequence of events and dates described in Exhibit 5. Assume the exchange rate and deposit rates of interest are stable.) Can this be used to reduce the price that Mr. Sousa charges the retailers? Would it be enough?
4. How important is the exchange rate and the exchange rate risk to this product's success in the Brazilian market? Would your answer change if the economy was experiencing hyperinflation as opposed to relative price stability? Would your answer differ if Crosswell had chosen to invoice in Brazilian Reals instead of U.S. dollars?

Appendix A Selected Financial Data for the Tranzonic Companies (years ended February 28/29) (U.S. dollars)

	1994	*1993*	*1992*	*1991*	*1990*
Sales	131,182,128	119,951,373	110,717,585	107,333,543	96,705,806
Operating earnings	4,858,423	6,816,888	7,193,019	6,714,882	5,541,952
Earnings before income taxes and cum effect	4,599,265	6,785,982	7,411,281	6,953,690	5,914,428
Income taxes	1,800,000	2,572,000	2,835,000	2,635,000	1,746,000
Earnings before cumulative effect of change in acctg	2,799,265	4,213,982	4,576,281	4,318,690	4,168,428
Cum effect of change in acctg	—	—	—	—	701,500
Net earnings	2,799,265	4,213,982	4,576,281	4,318,690	4,869,928
Per share amounts:					
Earnings before cum effect	.80	1.19	1.29	1.23	1.15
Cum effect of chg in actg	—	—	—	—	.19
Net earnings per common share	.80	1.19	1.29	1.23	1.34
Cash dividends:					
Per Class A Common Share	.18	.165	.16	.16	.16
Per Class B Common Share	.34	.325	.32	.28	.28
Total assets	73,537,946	63,675,545	58,015,061	52,515,283	49,498,159
Long-term debt	9,000,000	2,900,000	195,000	195,000	1,022,770
Shareholders' equity	47,479,072	46,328,637	42,743,659	38,848,871	36,103,517
Shareholders' equity per common share	13.75	13.21	12.32	11.24	10.31
Common shares outstanding	3,452,038	3,507,838	3,468,128	3,456,934	3,500,149

Fiscal year 1994 includes a $1,300,000 charge to operating earnings ($792,000 after-tax or 22 cents per share) for costs associated with restructuring the Housewares Division. Fiscal year 1990 includes the cumulative effect of a change in accounting for income taxes.

Appendix B Consolidated Statement of Earnings (years ended February 28, 1994 and 1993, and February 29, 1992) (U.S. dollars)

	1994	*1993*	*1992*
Sales	$131,182,128	$119,951,373	$110,717,585
Costs and expenses:			
Cost of goods sold	87,493,123	78,470,393	71,604,322
Selling, general and administrative expenses	37,530,582	34,664,092	31,920,244
Restructuring cost	1,300,000	—	—
	126,323,705	113,134,485	103,524,566
Operating earnings	4,858,423	6,816,888	7,193,019
Interest income	54,369	96,304	280,853
Interest expense	(313,527)	(127,210)	(62,591)
Earnings before income taxes	4,599,265	6,785,982	7,411,281
Income taxes	1,800,000	2,572,000	2,835,000
Net earnings	$ 2,799,265	4,213,982	4,576,281
Net earnings per common share	$ .80	1.19	1.29