

# Tokyo disneyland case study

Business



Tokyo Disneyland opened in April 1983 and Disney has been receiving Yen royalty receipts. In exchange, Disney uses AT&T's Doran. One problem is that ten percent of the royalty receipts are denominated in Yen, and the Yen has been experiencing a trend of depreciation, which erodes the receipts' values. Disney has begun work with Goldman Sachs to figure out the best way to hedge the exposure, as well as to acquire the cheapest cost of financing. Our analysis suggests that Disney should accept the method proposed by Goldman Sachs, where it would issue a Yen-denominated bond and then enter into a currency swap.

This would lower the cost of borrowing.

Details of our analysis are presented in the rest of the case. As indicated previously, the chief problem for Disney is how to hedge its exposure to a depreciating Yen, which would decrease the value of the royalty receipts. As indicated in the case, in 1984 the spot Yen/\$ rate is 248, which is almost an 8% depreciation from just a year ago. To make matters worse, the receipts are expected to grow at 10%-20% per year over the next few years, which would further increase Disney's currency risk.

There are numerous methods a company can use to hedge currency risk, such as through forward contracts, futures, and swaps.

In particular, we will explore Goldman Sachs' proposed method of entering into a foreign currency swap. This would create a Yen liability, which would allow Disney to pay out its Yen receipts and not worry about their depreciating value. Before we discuss the currency swap, let's first walk through all the options Disney has at its disposal. Disney's Options While

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there are many different methods of hedging, we should look into the cheapest option.

We will look into methods such as 1) futures/options, 2) forwards, 3) swap, 4) bank loan and, finally, 5) the combination of an ICE bond issuance ; a bequest Acumen Swap proposed by Goldman Cash.

1) Futures/Options: FIX futures and options are the conventional methods of hedging, since they are market- priced and have high liquidity. The values of these futures and options contracts would theoretically offset gains ; losses of the Yen royalty receipts and thus hedge currency risk. Unfortunately, according to the case, the liquid options and futures contracts only existed for maturities of two years or less.

This would not work out for Disney, which would need hedging for receipts beyond just two years. 2) Forwards: The other method to hedge would be forwards. Forward options are not exchange- traded and are thus much less liquid.

This can be observed via the Bid/Offer chart in the case, which provides rates for Yen Long-Dated FIX Forwards. The liquidity can be seen through the wide Bid-Ask offer spread, especially in longer maturities (e. G. Spot spread is 90 basis points, versus 460 basis points for 5-Year contract).

Clearly, Forwards suffer the same liquidity problem as Futures/Options: only short-term maturities have acceptable rates, but Disney needs medium to long term hedges. Not o mention, FIX Forwards would be perceived by banks

as risky and thus tie up Disney's credit lines, which are needed for daily operations.

3) Foreign-currency Swap (Swap Only): On the surface, this would work in Disney's favor because it can be customized to cater to Disney's needs (e. G. Longer maturity). It's also a method it has attempted before, in the previous year.

Unfortunately, the swap would also only be short-term, since the current Arteriolar debt on Disney's balance sheet all mature in one to four years.

Disney also believes that attractive swap rates for maturities less than four years were hard to find in the market. In addition, due to Disney's most recent Arteriolar issuance and high Debt/Equity ratio, Disney could not issue a long-term Arteriolar Dona (ten market would view it negatively). Not to mention, a swap would not provide additional funds to Disney, as it would only swap the interest payments.

Disney was looking for additional funds to pay down some of its short-term liabilities - the swap alone would not accomplish this goal. 4) Bank Loan from Japanese Bank: The other alternative would be to borrow directly from a Japanese bank.

at its prime rate. This would create a Yen liability, which would be paid using the royalties Disney receives from Tokyo Disneyland. This would rid Walt Disney of its Japanese receipts and hence reduce its exposure to a depreciating Yen. If Walt Disney were to pursue this option, it estimated it could borrow at a rate of 7.50%, paid semi-annually.

This option would not only hedge currency risk, but also provide funds needed to pay down Disney's short-term liabilities.

5) Goldman Cash Method – ICE Debt Issuance & Acumen Swap: Goldman Cash believes that while a Japanese ann. loan could possibly work, an even better option would be an ICE issuance combined with an Clone Swap. The ICE proceeds would be converted into dollar to pay off some short-term liabilities, and the swap would allow Disney to create a Yen liability. This would accomplish two objectives: allow Disney to hedge against a depreciating currency as well as provide funds to reduce its debt.

We now evaluate this option in more detail.

Cost of Funding (Before Swap) The first step in our swap analysis is to find the Quality Spread Differential (SD). Disney should only enter the swap if it provides a benefit to both sides. A positive SD would indicate that the Swap would lower the cost of funding. Our analysis indicated a positive SD of 0.82%, as shown in Exhibit 1.

Here are the details on the specific numbers: Disney (Yen): As indicated in the case, Disney has the option of getting a term loan from a Japanese bank.

It can obtain a 15 billion yen 10-year bullet loan at 7.50% and front-end fees of 0.75%. The debt cash flow schedule can be seen in Exhibit 2. The cost of yen of 7.

753% takes into account the front-end fee. Disney (CEO): If Disney were to acquire an ICE loan, it would have a cost of 9.473%. The cash flow schedule

(which includes periodic contributions to a sinking fund) is shown in Exhibit 2. It's important to note that the bond trades at a 25 basis point premium.

Also, it has a dollar expense of \$75,000. These two figures are taken into account when calculating the cost.

French Utility (Yen): The French Utility company's debt schedule shows all current outstanding debt. The only Yen debt it has on its balance sheet has a YET of 6.83%. This would be its cost of debt if it were to borrow Yen.

French Utility (CEO): The same debt schedule shows two ICE bonds – one issued in 1982 and the other 1985. We will use the YET of the most recently issued bond of 1985, which has a YET of 9.37%. Quality Spread Differential As previously stated, our analysis shows a positive SD of 0.82%, which suggests a Swap would be ideal for both parties to lower borrowing costs.

Most of the differential comes from Yen financing, where the difference was 0.92%, versus 0.10% for ICE financing. In terms of advantage, it appears that the French Utility company has an absolute advantage when it comes to financing in both currencies. This is because it has a lower cost of financing in both currencies.

Disney, on the other hand, has a comparative advantage in ICE financing, since it has less of a disadvantage at 0.10%. Our chart suggests that Disney should borrow in ICE and the French Utility should borrow in Yen (and subsequently swap the interest payments).

This will take advantage of both companies' comparative advantages and result in a lower overall cost of borrowing. Cost of Funding (After Swap) Using the <https://assignbuster.com/tokyo-disneyland-case-study/>

provided swap cash flow schedule in the case, we can calculate the swap cost of funding. The assumption is that the exchange rates are constant: \$/ICE of 0.

7420 and Yen/\$ of 248. Disney (Yen Swap Cost): Since Disney is borrowing in ICE but paying Yen in the swap, we must first convert the ICE proceeds into Yen (Note: This is for calculation purposes only.

In real life, as indicated in the case, Disney would convert the ICE proceeds into Dollars to pay off a portion of its short-term debt). A detailed calculation can be found in Exhibit 3. Once again, it's important to note that the bond trades at a 25 basis points premium, has a 2% fee and a \$75,000 fee (which must be converted from dollars to yen). This gives us a net Yen amount of 14,445,057,600.

Our calculation gives us a yen swap cost of 7.010%. French Utility (ICE Swap Cost): The French Utility company would be receiving Yen from Disney while paying CEO.

To calculate the cost of paying CEO, we need to discount the Yen payments and convert it to ICE (again, for calculation purposes only). The resulting total present value would be the Year 0 proceeds. As shown in Exhibit 3, the UP of the Yen payments is 14.

6 billion, which converts to 79.296 million CEO. Using the 79.296 as the Year 0 proceeds and the subsequent ICE swap interest payments, we come up with an ICE swap cost of 9.350%. BIG Fees: To calculate the fees

received by B] for facilitating the swap, we look at the last column in Exhibit 4.

To calculate the fees, we took the difference between the ICE received by Disney and the ICE paid out by the French Utility Company. Our calculation shows that BIG will receive 50 million yen from years 0 to 6, and then decreasing by 10 million yen every year until year 10, when it will receive 10 million yen. Comparison: No Swap vs.. Yes Swap We review our cost of funding in Exhibit 5. As shown in the chart, it makes sense for Disney to enter the swap, because it would reduce its cost of funding.

If Disney uses a swap, it would incur a borrowing cost of 7.10%, which is 0.7428% lower than if Disney were to not use a Swap. On the other hand, if the French Utility company uses a swap, it would incur a borrowing cost of 9.35%, which is 0.

0202% lower than if it were to not use the swap. Our numbers show that the swap helps Disney more than it helps the French Utility company. For Disney, a lower cost of 74 basis points is a lot higher than French Utility's saving on 2 basis points. Benefits ; Liabilities of the Swap From our model, it appears that the swap would work best for Disney.

However, there are undoubtedly risks involved with our model as well as the swap. We now discuss in detail some of the risks.

Exchange Rate Risk: In our model, we held the exchange rate constant for 10 years: \$/ICE at 0.7420 and Yen/Dollar at 248. However, this is clearly not realistic, as currency fluctuation is bound to occur in the 10 year period. For



Disney's purposes, the best situation would be if the Yen continues to depreciate. This would mean that Disney will pay out the same nominal amount, but the value of the payment would be less.

**Borrowing Cost Risk:** In our model, to assess the Quality Differential Spread, we looked at current market rates as indication of future borrowing rates. However, given market fluctuations (e. G. Higher Treasury yields), the borrowing rate rate could very well change by the time of the Swap. This is especially true for Disney: given its string of acquisitions and rapidly increasing t to Equally orator, now would ten market perceive another Dona Issuance? Would investors demand higher interest rates to compensate for the risks? Conclusion Based on our analysis, we recommend that Disney should accept the method reposed by Goldman Cash.