FINAL

Business Analysis & Valuation
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Introduction

On November 17th, 2013, Coin, a small San Francisco startup, came out of stealth mode and unveiled a technology that would change the credit card business forever. That day they introduced a single physical card that could store the numbers of multiple credit card accounts. Available immediately for preorder at $50, they pitched it as, “One card, for all your cards.” While this was a huge step forward in convenience, Coin unfortunately did not realize the technology’s full potential.

Blinded by the short term demand for a simple gadget, Coin missed the greater opportunity to disrupt the credit card industry forever. Another startup, Final, Inc., did realize that potential, and has been developing the technology since 2014. In January of this year, Final estimated that their product will launch in June, 2016.

Final’s strategy is to generate a unique card number for each transaction on the customer’s credit account. Theoretically, this will eliminate the possibility for fraud. “On the Web, for example, credit-card fraud as a percentage of all transactions is 2.1%” (WSJ) If Final receives the customary transaction fee from the merchant, but has significantly lower or nonexistent fraud by the user, they, or their financier, will be even more profitable. In addition, if Final reached a critical mass, companies that sign exclusive partnerships with banks and credit card companies, such as Costco for example, would be attracted to an exclusivity agreement from Final because they could offer a lower transaction fee.

If fraud expense can be eliminated, Final could essentially undercut the entire existing credit card market by offering lower prices for exclusivity. On the basis of this potential, I believe Final will be purchased by a credit card company for the sole purpose of eliminating the competition. To date, Final has received $1 Million in funding at an unknown valuation from 7 different venture capital firms, including the prestigious Y Combinator. Finally, as testament to how many consumers are interested in their product, Final currently has a waitlist with over 90,000 people on it.

Industry Review

The idea for a credit card network emerged in the middle of the 20th century. Consumers and merchants wanted a single credit account that could be used everywhere instead of a multitude of charge accounts at individual stores. The credit and debit card industry was launched with the creation of several payment networks in 1958. These would later merge and become Visa.

Products Offered

In the payment industry today, there are many products offered: credit cards, co-branded cards, private label cards, debit cards, prepaid cards and numerous other variations. All of the products allow consumers to make purchases at stores without cash on hand. Credit cards are traditional charge accounts, where the bank extends the customer a line of credit up to a predetermined amount. Credit cards earn the majority of their income from the interest accrued on the debt incurred by the customer. Co-branded cards are credit cards that work at multiple locations but carry the logo of a specific company, and often carry reward programs specific to that company. Private label cards are cards that work at one specific store. That store then receives some of the revenue associated with income from interest on that debt. Debit cards are cards that are linked to a specific bank account. They extend no credit, and funds are immediately withdrawn from the bank account upon completion of the transaction. Debit cards are similar in function to traditional checks written on a customer's bank checking account. Debit cards carry lower transaction costs (limit determined by Fed), and offer less fraud protection and no reward programs. Prepaid cards are similar to debit cards, in that the amount is withdrawn from a previously funded account, but they are used on a smaller scale and charge a fee when purchased.

A thorough analysis of the payment industry must not only include these variations of credit and debit cards, but also the processing companies, underlying banks, and combination firms that are associated with them. In general, the processing companies maintain the customers' account records, verify the transaction at the point of purchase, and collect a fee as a percentage of the transaction amount. Examples of processing companies are Visa and MasterCard. The banks float the funds involved and collect interest on the debt. Examples of banks are Barclays and Citibank. Finally, there are companies that do both, such as American Express. Final has announced it will be partnering with Visa, but has not yet named an associated bank. Its business model then will most closely match the Co-branded card. Information on Co-brand agreements is extremely limited due to their confidentiality and sensitive competitive data. Accordingly, this analysis will use data from both the traditional bank-processing and the combination models to determine the revenue per customer that the Co-brand affiliated company would collect from the Issuing Partner.

In addition to extending credit, some cards offer other notable financial products and rewards, both to consumers and to affiliated companies. Some Co-brands offer bonuses per new customer signed up, some banks share profits with the processing company, and some offer rebates for brand purchases. These will be examined and analyzed for their impact on profits and growth.

Fraud is a big expense in the payment industry, and an estimated $11.41 Billion[1] per year is split between the issuing banks and merchants, depending on the scenario. With an in-store purchase, the issuing bank continues to pay the merchant as if the transaction was valid. With online purchases, however, the merchant is responsible for any fraud incurred. If the customer used a credit card, he is protected from any loss. If he used a debit card, he may be responsible in some situations, depending on whether the bank is notified in a specified time frame. In addition, another $4.8 Billion[2] cost of the fraud is billed to the consumer.

Size

Today, the credit and debit card industry processes nearly $5 trillion per year. Over 120 billion transactions are made through 775.4 million accounts, including 336 million credit, 282 million debit, and 159 million prepaid accounts[3]. The FDIC estimates the entire industry's outstanding debt is $477 billion[4]. While the number of accounts is massive, the Fed estimates that 44% of credit cards are inactive, with less than one purchase per month. It also estimates that 24% of credit purchases happened online, versus 12% of all debit charges being online. "Viewed broadly, the payments industry (which includes organizations that store, process, and transmit cardholder data) has three quite attractive attributes: It's large, it's growing, and — thanks to its relatively stable and predictable transaction volumes combined with low capital intensity — it's highly profitable."[5] Altogether, the credit and debit card industry has nearly $100 billion in net income per year. The FDIC estimates that credit card companies (the underlying bank) receive nearly 21% ROE, a 3% ROA, and maintain a 9.58% net interest margin[6]. The Payment Industry is crucial to the economy because it allows consumers to purchase items on the spot even if they don't have enough physical cash or working capital.

Key Players

The key players in the payments industry are described below. These include the processing companies, the underlying banks, the combination firms, notable Co-brand relationships that represent a significant share of the market, and other notable payment companies.

<u>Processing Companies</u>

Visa

- Valued at $184 billion, 11,300 employees.
- "Visa Inc., a payments technology company, operates an open-loop payments network worldwide. The company facilitates commerce through the transfer of value and information among financial institutions, merchants, consumers,

businesses, and government entities. It operates VisaNet, a processing network that enables authorization, clearing, and settlement of payment transactions; and offers fraud protection for account holders and assured payment for merchants.” [7]

- Has line of credit cards and does processing for most companies.
- Most debit cards are issued through Visa.

MasterCard

- Valued at $100 billion, 10,300 employees.
- “MasterCard Incorporated, a technology company, provides transaction processing and other payment-related products and services in the United States and internationally. It facilitates the processing of payment transactions, including authorization, clearing, and settlement, as well as delivers related products and services. The company also offers value-added services, such as loyalty and reward programs, and information and consulting services” [8]

Discover

- Valued at $22 billion, 11,650 employees.
- “[Discover] operates in two segments, Direct Banking and Payment Services. The Direct Banking segment offers Discover-branded credit cards to individuals; and other consumer products and services, including private student loans, money market accounts, savings accounts. The Payment Services segment operates the Discover Network, which processes transactions for Discover-branded credit cards, and provides payment transaction processing and settlement services.”[9]

<u>Banks</u>

Many banks offer debit cards and act as the issuing partner.

<u>Combination Firms</u>

American Express

- Valued at $60 billion, 54,000 employees.
- Credited with the creation of the charge card nearly 70 years ago.
- A credit card-only company, AMEX collects payment and fronts capital for its own accounts.
- Estimated that 23% of all American Express cards are Co-branded. [10]
- “American Express Company, together with its subsidiaries, provides charge and credit payment card products and travel-related services to consumers and businesses worldwide.” [11]

<u>Notable with Co-brand Relationships</u>

Costco and American Express, CitiBank and Visa

- Costco was partnered American Express for 16 years, generating 8% of American Express’s business. Broke with Amex after getting better offers from

Visa and CitiBank. “Although we competed aggressively to renew our co-brand and merchant acceptance agreements with Costco Wholesale Corporation in the United States, we were unable in the end to reach terms that would have made economic sense for our Company.” [12]

- Costco Co-branded cards represented nearly 10% of all American Express cards, and had exclusivity agreements with American Express at the checkout lane.
- Costco in return received significantly lower merchant fees, estimated to be around .6%, versus the average of 2.5%[13].

JetBlue Airways

- Currently has card with Barclays and MasterCard.
- Another high profile breakup with American Express allowed the world to see a little more data concerning these deals.

Delta Airways

- Currently has a card with American Express.
- Makes inflight announcements about the card, indicating reward for bounty in this deal must be large.
- Delta and American Express both publish enough data on each other to estimate the true cost of the partnership.
- In 2015, 6% of billed American Express Business and 18% of loans held by card members in total belonged to Delta Co-branded cards.

<u>Other Notable Payment Companies</u>

Simple

- Valued at $117 million on February 25th, 2014, when sold to a bigger bank.
- Simple’s customers pay no interest and are charged no fees.
- No physical locations.
- Highly integrated technology. Consumer interface is extremely friendly and intuitive.
- Excellent customer service. Not only can you text their support line to handle inquires about charges, but there are no wait times on phone calls. A support representative immediately picks up and assists customers with their accounts.

Synchrony Financial

- Valued at $26 billion, 11,000 employees.
- Relatively unknown player in payments market because they make unmarked private label cards.
- Provides stores like Walmart or TJMaxx an option to allow consumers to finance their products. IPO’d as a spin off from GE Capital in 2014.

- Has comparably lower expense ratios compared to the rest of the industry, but nearly double charge off rates.

Co-Brand Industry

The credit card Co-brand industry is rewarding for both the Brand and the Issuing Partner (IP). The Brand is the company that is allowing its logo to be used on the IP's cards, and the IP is the company that issues cards and is responsible for extending credit and collecting payment. Often the IP is American Express, or a third party bank bundled with Visa or MasterCard, while the Brand is a large nationwide company like Delta, Costco or JetBlue.

Traditional agreements between Brand and IP are more complicated than a simple 1% of revenue. Recent events have revealed some of the details of certain partnerships. Bonus incentives can include:

- <u>The Bounty</u>: IP's pay the Co-brand a bounty for each customer that signs up. The bounty is usually between $0 and $100. This explains why companies such as Delta mention their credit card numerous times during every commercial flight. Credit card companies depreciate this cost to smooth out variation in reports.
- <u>In Store Rebate</u>: IP's wave any processing fee for purchases that are in the Brand's store. This is huge for companies like Costco or airlines, and why they sometimes require you to have a specific type of card to be able to charge purchases.
- <u>Revenue Sharing</u>: A certain percentage of revenue that banks collect on late fees or interest are often shared with the Co-brand.
- <u>Profit Sharing</u>: Smaller Co-brand agreements often have a profit sharing clause. For example, if issuing banks obtain their profit goal, they will give 50-100% of the excess profit to the Co-brand.
- <u>Reward program</u>: Cards offering reward programs often must purchase the Co-brand's products to reward the customer. This tactic is often used with airline Co-brands. After analyzing five different Brand/IP deals, only one, the Delta and American Express partnership, published enough data to determine how much American Express was giving out in rewards for every dollar spent on Delta Co-brand cards. The partnership was responsible for over $213 billion world wide billed business for American Express for the years 2012 through 2015. American Express used $2.4 Billion worth of miles in the same time period. This means that in addition to other costs, American Express spent roughly 1.13% per transaction on all Delta Co-brand card transactions. See exhibit A
- <u>Data</u>: IP's share information about where customers are spending with the Co-brand.

Regulatory

The credit card and loan industry has a large amount of regulation. The most significant regulation was passed in 2009, when Obama signed into law the CARD act that required credit card companies to follow regulation set up by several federal agencies. The new regulations:

(1) prevented multiple interest rate hikes per year
(2) limited a universal default
(3) introduced the right to opt out if change in terms of services,
(4) introduced regulations to curb people under 21 from opening credit cards,
(5) made it easier for people to understand when payments are due,
(6) required that highest interest balances be paid first,
(7) introduced a limit on over withdrawals,
(8) gave fair minimum payment disclosures
(9) introduced late fee restrictions.

Additional legislation passed includes the Truth in Lending Act, the Fair Credit Billing Act, the Fair Credit Reporting Act, and the Fair Debt Collection Practices Act. Highlights of these laws include:

(1) all advertised rates must be available fairly
(2) a $50 limit was placed on unauthorized charges,
(3) a right to access your credit,
(4) a time limit for negative information on credit
(5) regulations on when debt collectors can call and who they can talk to.

It is anticipated that Final will avoid regulatory arbitrage and will abide by the spirit and the letter of these regulations. Final's strengths are in its technological innovation, not new and creative ways to circumvent the law at the expense of its customers.

Final, Inc. Company Analysis

Products Offered

Final, Inc. announced in June, 2016 that it will release its first product, Final, a high tech and modern credit card service. Final differs from existing credit cards in that the customer's account is no longer bound to a single card number. Instead, Final generates a unique number for each transaction the customer initiates. This will virtually eliminate the risk of fraud for all parties involved in the transaction.

For purchases made using the physical card, the card number is changed on every swipe by using Bluetooth low energy to connect to the Internet. For non-swipe purchases, such as online or over the phone, customers can log in online and request a unique number. During the request process, which is fulfilled automatically, customers can request a number that expires on a certain date (days, weeks, months, years), a number that is limited to a number of charges, or a number that is not limited. A web plugin for smartphones and desktops allows this request to be completed on the checkout screen of any browser, making it as simple to use as autofill. The customer is able to cancel any of his numbers at any time.

Final's highly intuitive online interface easily displays a customer's balance, an in-depth analysis of spending patterns, a bill-pay service and more. Key to Final's initial success in signing up customers is its clean and modern website interface. It clearly explains Final's convenience and advantages, particularly its ability to eliminate potential credit card fraud.

Several key facts are known about the implementation of Final's product. The card will operate on the Visa network. It is expected that in exchange for Final's service, the customer will receive no rewards and possibly pay a small annual fee. The financial transactions of Final's product are expected to be processed by a large bank, similar to the JetBlue branded MasterCard being financed by Barclays. In years to come, and with additional funding, Final could potentially become their own financier. These product features are hardly unique, though, and Simple Bank has built just such a business. Final's weapon over its competition, however, is its technology to combat fraud.

Competitive Advantages & Disadvantages

Since Final is entering the extremely competitive field of payment services, they will need to have several advantages, as well as few disadvantages, when compared to traditional credit card companies.

Advantages

- <u>Fraud</u>: The Final card number will change with each transaction. This will significantly reduce the possibility of fraud. "59% of American consumers are 'extremely' or 'very' concerned about having their card data stolen." (BankTech)

Credit card and debit card fraud resulted in losses amounting to $16.31 billion during 2014. "Card issuers and merchants incurred 62% and 38% of those losses, respectively."[14] Most card issuers cover merchants and consumers for any fraud that occurs, but in some cases, that cost of fraud is pushed through to the consumer. It's estimates that customers are billed for $4.8 Billion in fraud charges per year[15]. In addition, the incidence of fraud is rising. "During 2014 credit card and debit card gross fraud losses accounted for roughly 5.7₵ per $100 in total volume, up from 5.22₵ per $100 in 2012."[16] Laws in the U.S. limit credit card companies from passing on more than $50 per fraud incident to consumers. If Final can eliminate fraud, customers, merchants and banks would all directly benefit from the resulting reduced costs.

- Tech Friendly: One of the core reasons Final has been able to implement the technology so quickly is because the technology is evolving at a faster rate than financial giants can innovate and upgrade their existing infrastructures. Technology is one of Final's key pillars, and Final will continue to innovate and gain more users.
- Customer-centric: Like the majority of successful tech startups, Final will have an extremely easy to use interface that is modern and customer-centric. Final has released photos of their anticipated online system, and it is years ahead of the bill pay websites that existing competitors such as Barclays and American Express currently use. A sleek and modern interface will help Final gain key customers that they will use to help grow their program.
- Merchant likes: If Final can reduce fraud online, merchants will love it. Since merchants are responsible for fraud committed online, they will no longer lose money when fraudulent transactions are processed.

Disadvantages

- Rewards Program: Most major credit cards offer reward programs. In our analysis, Final will not offer a reward program during Years 0-5, but will introduce a rewards program in Year 5 to stimulate growth. This could significantly affect total billed business on the platform. However, it should be pointed out that debit cards, which the Fed estimates are rising in popularity since the great recession, offer no reward programs. Final won't be the customer's only card without incentives.
- Startup: Final will have a serious disadvantage due to its small size. It could have potential problems being a new player competing with several financial giants. It also would not take long for a major credit card company to copy and integrate the idea into their own service.
- Niche: Final could be more difficult to use by some people than they may find it is worth. This could result in Final having a smaller market share.
- Benefits: In addition to a rewards program, credit card companies offer an array of benefits. American Express for example provides protection against accidental

loss or damage for 90 days after purchase. Final could suffer from its inability to offer such a benefit due to it's small size.

How Final Makes Money

Final will be the contact point for the card-holding credit customer. It will provide the front end for all customer interactions with the Visa processing network and the bank. Visa and the bank will not provide any customer service, but will provide access to each other's relevant data and resources. It is expected that the individual underwriting process and requirements will be determined by the bank, but executed by Final.

Final's income will be derived from several revenue streams, including income from its Co-brand partnerships, merchant fees, a share in profits from the bank, and possible annual service fees from its customers. Final will not offer a rewards program in the short run but may revisit that decision in the future.

As Final provides nearly all services other than the actual lending, it will be assumed that Final's bank partner will share a significant percentage of profits with Final. This relationship not only provides revenue for Final, but also adds back savings from special Final advantages.

Potential Revenue & Income

Over $5 trillion is processed each year through both credit and debit card payments. Given its benefits for merchants and customers, it is possible that Final could grow and capture a significant share of that market. Instead of estimating Final's income in a certain year to be based on a particular percent of the entire market, however, it would be more accurate to use estimates of the growth of Final's product combined with data from similar financial companies to determine revenue and costs per dollar on Final's network.

Final's financials must be estimated as it has yet to launch its product and there is no publicly available data. The following assumptions have been used to build a reasonable business model. These are based on existing and comparable industry standard practices and data.

- Final's metrics for average loans, revenue from loans and operating margin will be estimated using American Express metrics. Average loans per account will be $500 (50% off American Express), revenue per loan dollar will be 18% (one third of American Express's as Final has fewer financial products and is not a payment network), and Net Interest Margin will be the industry average 9.58% (Amex is 9%).
- Final will receive a $45 bounty for each signup from the partner bank, within the $0 - $100 bounty average previously described. 50% of this bounty will excluded to make up for above average marketing costs.

- Final's user growth is based on growth rates at Simple and Coin. Each of these companies created similarly novel, clean and technology-based services, and their customer bases show us how many users would potentially be interested in a comparable, yet different, service. Simple had 100,000 open bank accounts after two years in private beta, with a 66% idle rate, higher than the debit industry average idle rate of 35%.[17] Coin sold 250,000 cards at a MRSP of $99 in just two years. Demand for Coin may have been hurt over time because of countless delays in getting the product to market, as well as the fact that the product eventually shipped did not work 100% of the time as advertised.
- Consumer loans per user will mirror 50% of American Express during first 5 years, than solely increase to 60%. Users will be excited to use Final for purchases that they feel could be unsecured, but will continue use cards with better rewards for bigger purchases due to the added benefits those purchases would garner.
- Final's bank will pay Final 70% of its profit, because Final will preform the majority of services, and the bank will solely front the capital, unlike the traditional Co-Brand where the IP does all the work. This 70% is estimated from American Express's operating margin.
- By using the industry Net Income Margin, estimates for expenses, customer service, physical cards, office space and more will not be needed. See Exhibit D.
- Exclusivity is a huge option for future revenue and profit. However, since too much can change between now and then, it will not be included in the model.
- Final's product launch strategy is as follows:
    1. Launch in June 2016 and open up with a small Beta program.
    2. At end of Year 2, the Beta program ends, allowing the company to triple its users (similar metric occurred after Beta end for Simple).
    3. Slightly higher growth will continue in Year 4 because Final will attract increased signs ups due to popularity of fraud avoidance.
    4. In Year 5, Final will introduce a small rewards program, and slowly faze it into the same scale as American Express (1.13% of total transactions spent on rewards).
- Final will save 1.13% per transaction by not having a rewards program.
- Final will save on fraud. $11.41 billion fraud billed to merchant and IP per 775 million cards, multiplied by 62% in store purchases with credit (amount IP is responsible for) = $6.91 per user in costs that Final can reduce.
- Estimation will not include any losses/expenses before Final's estimated launch

Finals growth estimation is summarized in Exhibit B. A summary of all other estimations can be found in Exhibit C.

Company Valuation

Using all estimations stated in the Potential Income and Revenue section, which are also summarized in Exhibits B and C, the present value of Final is estimated to be $185 Million. This is determine this by calculating the partner bank's income, calculating all income sources for Final, and then discounting future earnings based on the average Payment's Industry cost of capital.

Key calculations included in the assessment of Final's valuation are:

- Estimating partner bank income (Exhibit E): A stated earlier, Final's average loans per customer would be half of those of American Express. Final Card Bank Revenue can be determined by using Final's estimated loan/revenue income percentage (18%). An Industry average Net Income Margin (21.84%, Exhibit D) is then used to calculate what the bank's income would be. While Net Income Margin includes traditional operating expenses that Final would cover in this relationships, operating expenses are not credited here. This is because an accurate estimate would be difficult, and the bottom line amount that Final receives will be the with out having to credit and then reintroduce operating costs on either side. According to the estimate above, Final receives 70% of the Bank's Net Income, because Final is doing the majority the work.

- Estimating Final's Total Income (Exhibit F): Income associated with Final's other operations are now reintroduced into the equation. Bounty fees, Profit Sharing, Reward program credits and fraud savings are now totaled to calculate Final's income (excluding taxes).

- Estimating Final's Cost of Capital (Exhibit G): To estimate Final's Cost of Capital, an average of certain comparable companies in the Payments Industry is taken. To account for uncertainty in this method, a 25% premium is added to that number.

- Present Value (Exhibit H): Final's present value is determined through discounting future cash flows. 7.43% is used for the Cost of Capital, and a growth rate of 3.1% (U.S. Average) is used. Total present value is calculated as $185 million.

- Sensitivity Analysis (Exhibit I): Terminal Value can differ dramatically based on smaller changes in growth rates and cost of capital estimations. This analysis shows you valuation results with a +/- 2% swing on cost of capital, and a +/- 1% swing on the terminal growth rate. This estimated present value to be between $112 million and $557 million.

Unvalued Options

Below are several other potential business options that Final could pivot to if unsuccessful in its initial form.

- Payment Processor: Final could morph into a payment processor. Since Final will have less fraud on its network, it could process for less and attempt to eliminate fraud. A difficult problem would be obtaining critical mass.
- Exclusivity Monster: Merchant Banks would be happy to make their service exclusive to Final users if Final had critical mass because it would eliminate charges due to fraud and save them money. If Final became a payment processor, it could offer lower credit interchange fees due to its lower cost structure from fraud savings and a lack of customer reward programs.
- IP: With enough capital, the bank could provide its own lending services, essentially cutting out the IP in a quest to become more profitable.

Conclusion

Final's concept and technology have the ability to change the credit card industry forever. Final's anticipated June, 2016 launch will be an important milestone to meet. With a successful Beta program it should have a customer base with enough critical mass to ensure its successful adoption in one to two years.

However, it will not take long for a major credit card company to copy and integrate Final's idea into their own service. It would probably take 3 to 5 years however for such a significant infrastructure change, especially as evidenced by the slow rollout of credit cards with the EMV chip.

There is a high likelihood that Final could be purchased shortly after launch by a company like American Express. American Express has grown its huge payment network over the years with its ability to lower transaction fees for exclusivity agreements. After the fallout of the Costco-American Express deal, American Express is most likely looking for ways to lower transaction fees to make sure it does not happen again. There are hints of this in the Delta-American Express deal, which represents 8% of American Express's business. In 2016, American Express was not scheduled to purchase its annual point alignment from Delta, which it has done for the last four years, signaling that they had excess points. This means that the underlying contract also expires around this year, and a renegotiation and commitment to buy more points is needed. Considering how bad the fallout from the Costco-American Express deal was, it is likely that American Express would do anything to prevent a possible Delta drop out. Buying a small startup like Final would be pocket change for American Express. This would put American Express on the path to being able to offer lower interchange fees in order to gain exclusivity. It would become the merchant's preferred choice, shifting preference to American Expresses network from Visa and MasterCard's.

Final is a both a potential gold mine and financial industry disrupter. Once one of the large payment networks realizes its potential and feasibility, they will either purchase the company to prevent competitors from getting the technology and to have it incorporated into their own products, or immediately copy the idea and implement similar changes to their own products.

Appendixes

Exhibit A: American Express Spending on Delta Sky Miles

Data from Delta and American Express annual reports.
(millions unless specified)

	Year					
	2010	2011	2012	2013	2014	2015
Amex Delta Miles Purchase, end of December		$675	$675	$675	$675	
Ending balance						$300
Miles used to date 2015						$2,400
Amex Total Spend (Billions)	$879	$888	$952	$1,004	$1,002	$1,004
Percent Airline	-			9%	9%	
Percent Delta WWB	5%	5%	5%	5%	6%	6%
WW card member loans	15%	15%	15%	15%	18%	20%
Amount spent on Delta Cards	$43.95	$44.40	$47.60	$50.20	$60.12	$60.24
Total Spent on Amex Delta During new agreement						$218
USD value of miles used to date						$2,400
Delta Miles, cost per transaction						1.13%

Exhibit B: User Growth of Coin & Simple, & Estimated Final Growth

Estimated timeline explaining user growth for Final in Potential Revenue & Income.
Data from Coin and Simple.

	Year										
	0	1	2	3	4	5	6	7	8	9	10
Simple	x	x	100,000	330,000							
Coin	50,000	x	250,000	x							
Final	5,000	45,000	90,000	270,000	405,000	538,650	592,515	651,767	716,943	759,960	782,759
CAGR		800%	100%	200%	50%	33%	10%	10%	10%	6%	3%

Exhibit C: Metrics used for Final DCF

Most sources disclosed above. American Express data from 10-K Annual Report

Percent Amount of Fraud Decrease on Final	75%
Partner Bank Net Income Share	70%
Amex Expenses as % Revenue	70%
Amex Revenue/Loan	56%
Average Bank Net Income %	21.84%
Final Revenue/Loan	18%
Amex NIM average	9%

Total Amex Loans	$58,799,000,000
Fraud Charged to Credit instore	$7,136,200,000
Total Amex Customers	117,800,000
Average Amex spending per customer	$499.14
Expected income per bounty	$22.5
Fraud Cost per user, national average	$6.91

Exhibit D: Payment Industry Sales Multiples

Data from Bloomberg. Average net income sales multiple is 21.84%

	EBITDA/Sales	Net Income/Sales
American Express	30.79%	14.99%
Barclays	9.78%	-0.18%
Citi Bank	45.60%	19.53%
Visa	68.86%	45.59%

	EBITDA/Sales	Net Income/Sales
Mastercard	30.79%	14.99%
Discover	9.78%	-0.18%
Capital One	45.60%	19.53%
Synchrony	68.86%	45.59%

Exhibit E: Estimating Final Partner Bank Income

Data from combining bank metrics and Final user growth.
(millions)

	Year										
	0	1	2	3	4	5	6	7	8	9	10
Total average loans	$1.25	$11.23	$22.46	$74.12	$111.18	$147.87	$162.66	$178.93	$196.82	$216.50	$238.15
Final Card Bank Revenue	$0.23	$2.07	$4.14	$13.65	$20.48	$27.24	$29.96	$32.96	$36.25	$39.88	$43.86
Bank Income	$0.05	$0.45	$0.90	$2.98	$4.47	$5.95	$6.54	$7.20	$7.92	$8.71	$9.58

Exhibit F: Total Income Including Adjustments for Savings

(millions)

	Year										
	0	1	2	3	4	5	6	7	8	9	10
Bounty	$0.11	$0.90	$1.01	$4.05	$3.04	$3.01	$1.21	$1.33	$1.47	$0.97	$0.51
Profit Sharing	$0.04	$0.32	$0.63	$1.90	$2.85	$3.79	$4.16	$4.58	$5.04	$5.34	$5.50
Rewards Program	$0.01	$0.13	$0.25	$0.76	$1.14	$1.52	$0.84	$0.74	$0.61	$0.43	$0.22
Fruad savings	$0.03	$0.31	$0.62	$1.86	$2.80	$3.72	$4.09	$4.50	$4.95	$5.25	$5.41
Total Income	$0.20	$1.65	$2.52	$8.57	$9.82	$12.03	$10.30	$11.15	$12.06	$11.99	$11.64

Exhibit G: Cost of Capital Estimation

Final's Estimated Cost of Capital is computed by taking the average of several comparables and then adding a 25% premium for uncertainty. Data from Bloomberg

	Equity Weight	Equity Cost	Debt Weight	Debt Cost	Preferred Equity Weight	Preferred Equity Cost	CoC
American Express	53.90%	9.00%	46.10%	1.60%	0.00%	0.00%	5.59%
Barclays	12.40%	9.60%	84.90%	0.50%	2.60%	0.00%	1.61%
Citi Bank	23.70%	11.30%	72.90%	1.40%	3.40%	4.80%	3.86%
Visa	92.00%	9.20%	8.00%	1.70%	0.00%	0.00%	8.60%
Mastercard	96.90%	10.30%	3.10%	1.80%	0.00%	0.00%	10.04%
Final Estimated CoC							7.425%

Exhibit H: Present Value of Future Cash Flows

Comparable Cost of Capital used from exhibit F. Terminal Growth rate used is GDP average, 3.1%.
(millions)

	Year										
	0	1	2	3	4	5	6	7	8	9	10
Total Income	$0.20	$1.65	$2.52	$8.57	$9.82	$12.03	$10.30	$11.15	$12.06	$11.99	$11.64
Present Value	$0.20	$1.54	$2.18	$6.91	$7.37	$8.41	$6.70	$6.75	$6.80	$6.29	$5.69
Terminal Value											$131.50
Total Present Value											$184.66

Exhibit I: Sensitivity Analysis

Tests valuation using different cost of capital rates and terminal growth rates
(millions)

		Terminal Growth Rate				
		2.10%	2.60%	3.10%	3.60%	4.10%
Cost of Capital	5.43%	$265.50	$302.03	$354.28	$435.15	$577.06
	6.43%	$200.41	$219.29	$243.84	$277.08	$324.62
	7.43%	$159.97	$171.03	$184.66	$201.85	$224.21
	8.43%	$132.45	$139.49	$147.85	$157.93	$147.85
	9.43%	$112.57	$117.30	$122.77	$129.19	$136.81

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