











CREDIT CARDS

VALUE TRAPS WITH DOWNSIDE RISK

SEP 28, 2016

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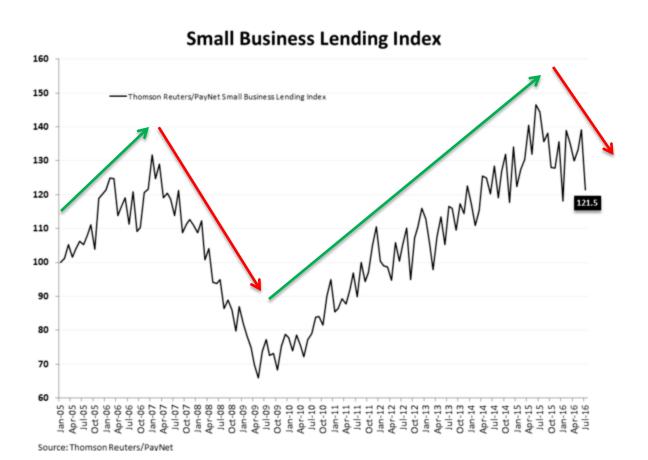


IT'S LATE CYCLE



B. Rich HEDGEYE

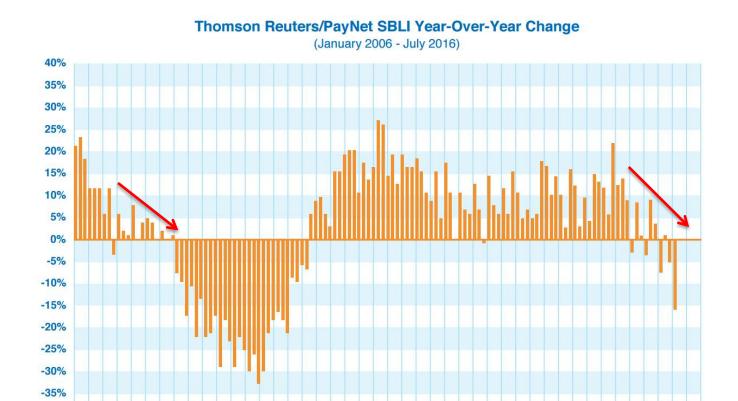
SMALL BUSINESS CANARIES – LOAN VOLUMES



Small Business lending volumes dropped -12.7% MoM in July according to the latest Thomson Reuters/Paynet Small Business Lending Index. At an index reading of 121.5, this represents the slowest pace of small business lending activity in almost two years outside of the peak growth/deflationary angst print in January.

Looking back, lending peaked in Jan, 2007 in the last cycle and declined ~15% by the end of 2007. This cycle, lending peaked in June, 2015 and is now down ~17%.

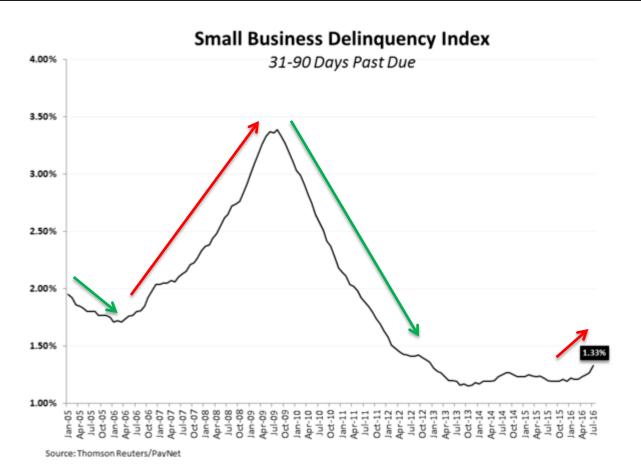
SMALL BUSINESS CANARIES - LOAN VOLUMES



The Y/Y change taking place in small business lending originations is also striking. Three of the last four monthly prints have been negative Y/Y and the most recent print is down over 15%. The last time the index looked like this was December, 2007.

-40%

SMALL BUSINESS CANARIES - DELINQUENCIES

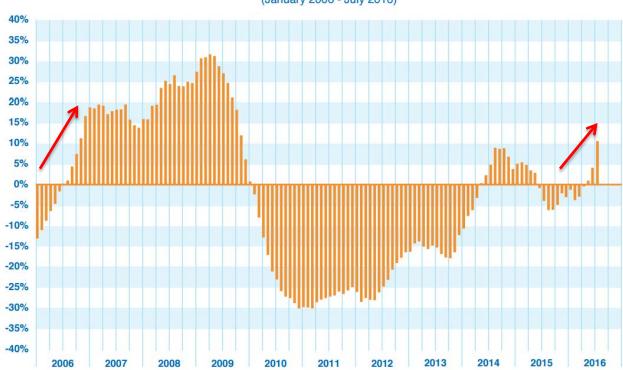


Small Business loan delinquencies volumes dropped -12.7% MoM in July according to the latest Thomson Reuters/Paynet Small Business Lending Index. At an index reading of 121.5, this represents the slowest pace of small business lending activity in almost two years outside of the peak growth/deflationary angst print in January.

SMALL BUSINESS CANARIES - DELINQUENCIES

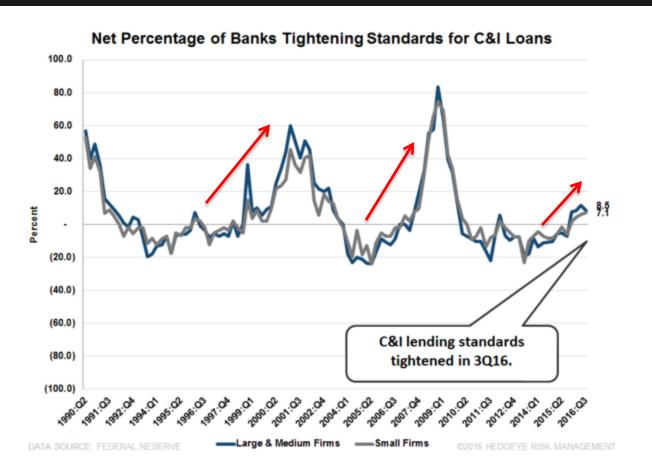
Thomson Reuters/PayNet SBDI Change vs. Year Prior

(31 - 90 Days Past Due) (January 2006 - July 2016)



While the uptick in small business delinquencies thus far has been relatively small, it's also been the largest increase we've seen since the Great Recession.

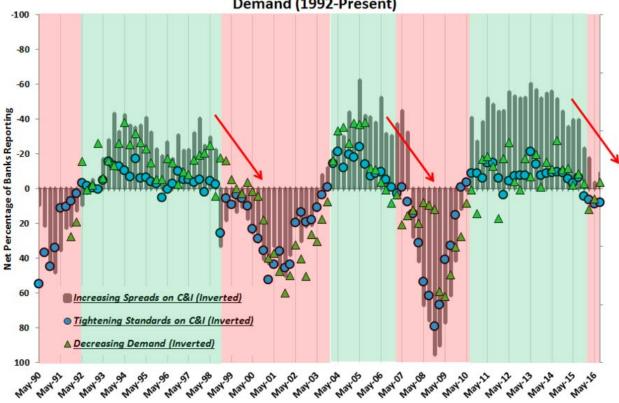
LARGE & MID-SIZE CANARIES - C&I LOANS



A net percentage of banks tightened C&I lending standards for the fourth quarter in a row in the most recent Fed Senior Loan Officer Survey (Early August). 9% of banks tightened C&I standards for large and medium firms (7% for small firms). While the net percentages are still fairly low, it's the trend inflection that matters.

LARGE & MID-SIZE CANARIES - C&I LOANS



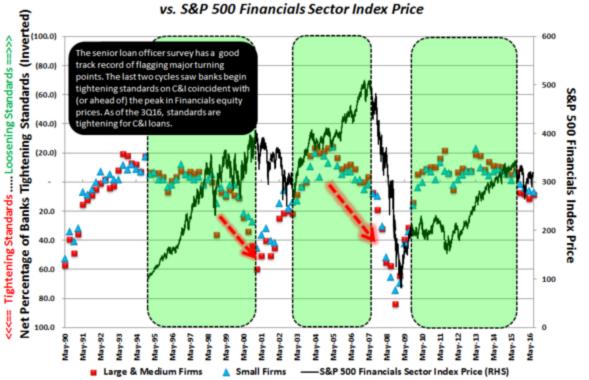


Historically, when C&I standards have begun to tighten it has coincided with a general tightening in credit conditions.

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LARGE & MID-SIZE CANARIES – CRE LOANS



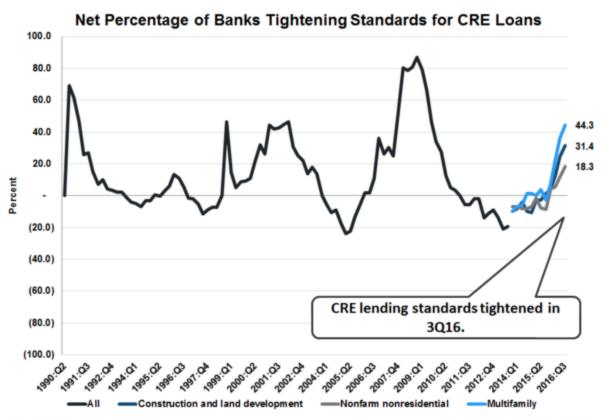


The persistent negative responses in the C&I and CRE lending categories appears to be signaling an inflection point in the credit cycle. The chart to the left shows historical C&I lending standards (LHS) vs the S&P 500 Financials Index (RHS). C&I lending standards have historically begun tightening coincident with or ahead of peaks in Financial equity prices.

Source: Federal Reserve Senior Loan Officer Survey



LARGE & MID-SIZE CANARIES – CRE LOANS

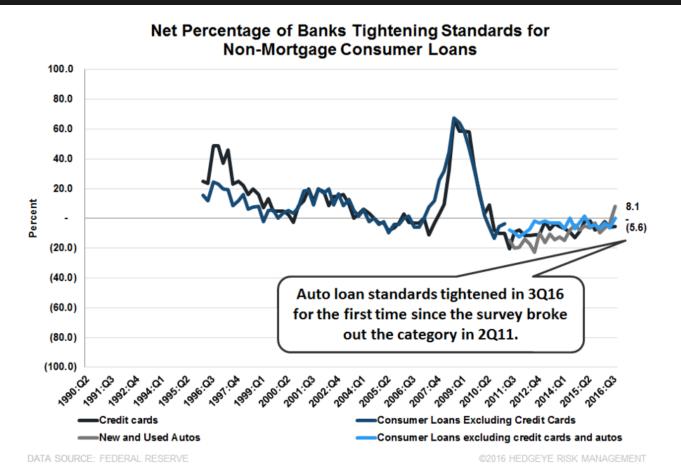


DATA SOURCE: FEDERAL RESERVE

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Commercial real estate (CRE) lending saw continued tightening this quarter across all three subcategories: Construction & Development (C&D), Nonfarm Nonresidential. and Multifamily. This marks the fifth quarter in which standards have tightened on C&D loans and the fourth quarter in which Nonfarm Nonresidential loans have seen standards tighten. The MF category reached a new high at 44.3% of banks tightening this quarter.

CONSUMER CANARIES – NON-MORTGAGE CONSUMER



Consumer loan standards are also trending towards tightening. Auto loans are the most conspicuous example, where lending standards are now tightening, but credit card and other consumer loans (ex card and ex auto) are also trending towards the zero-bound

SHOCK ABSORBERS?

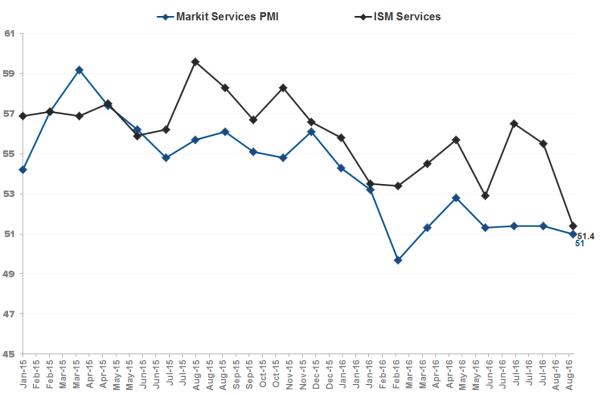
The Fed's Policy Cushion **Economic Cycle Economic Cycle** Cycle Recession Subsequent **Fed Funds Fed Funds** Policy Peak Level Trough Level Cushion Peak Trough Duration (Mo.) Expansion (Mo.) Dec-69 Nov-70 11 36 9.2 3.7 -5.5 Nov-73 Mar-75 16 58 -7.7 12.9 5.2 Jan-80 Jul-80 17.6 9.0 -8.6 Jul-81 Nov-82 16 92 19.1 8.5 -10.6Jul-90 Mar-91 120 9.9 2.9 -6.973 Mar-01 Nov-01 6.5 -5.6 79 Dec-07 Jun-09 5.3 -5.2 65 12.5 5.1 -7.5 Average Current 79 0.30 vs Historical Ave UPSIDE / -0.3UPSIDE / vs Historical MAX/MIN Current Policy Cushion =

One of the challenges as we move into this next cyclical downturn will be the Fed's ability to stimulate. In the last 7 cycles, the Fed has eased rates by an average of 750 bps. In the last two cycles, it has cut rates by 560 and 520 bps. The current policy cushion, meanwhile, is less than 50 bps.

Source: NBER, BEA, BLOOMBERG, CENSUS BUREAU, NAR, Robert Shiller, HEDG

ISM MANUFACTURING AND SERVICES ARE ROLLING OVER

ISM VS MAKIT PMI FOR SERVICES



ISM Services print worst since 2010. Drops -4 pts sequentially with Business Activity and New Orders dropping a remarkable -7.5 pts and -8.9 pts, respectively. Employment down -0.7 and barely holding positive at 50.7 as well.

New Orders posted its largest sequential decline in 104 months.

DATA SOURCE: BLOOMBERG

THE PREPONDERANCE OF US ECO DATA IS WORSENING

U.S. ECONOMIC INDICATOR SUMMARY													
	MOST RECENT DATA							ST PRICE	QoQ Chg	Y/Y Chg			
		Period	Latest data	nta Last Price Prior Period		MoM Chg	3M Ave	6M Ave	TTM Ave	(3q16)	(Qtrly)		
CONSUMPTION	Personal Spending (Real PCE), YoY %	Jul-16	Better	3.0%	2.9%	0.06%	0.2%	0.3%	0.3%	0.3%	-0.2%		
	Personal Income, YoY %	Jul-16	Better	3.3%	3.1%	0.14%	0.1%	-0.1%	-0.4%	0.0%	-1.0%		
	Real Disposable Income (per capita), YoY %	Jul-16	Better	2.0%	1.8%	0.19%	0.1%	-0.1%	-0.2%	0.1%	-23.0%		
	Retail Sales, YoY %	Aug-16	Worse	1.9%	2.4%	-0.46%	-0.5%	-0.4%	-0.5%	-0.5%	-0.2%		
	Consumer Credit, YoY %	Jul-16	Worse	6.0%	6.0%	-0.01%	-0.1%	-0.3%	-0.6%	-0.3%	-0.9%		
	NFP Employment, MoM Chg	Aug-16	Worse	150	274	-124.0	-81	-24	-53	67	21		
	Initial Claims, NSA, YoY %	Aug-16	Worse	-4.5%	-5.9%	1.4%	0.8%	0.3%	1.7%	-1.4%	4.4%		
	Consumer Confidence	Aug-16	Better	101	97	4.4	2.7	4.7	4.4	4.1	0.6		
	Real Weekly Earnings, Y/Y %	Aug-16	Worse	0.4%	1.2%	-0.76%	-0.5%	-0.6%	-0.9%	-0.3%	-1.5%		
	Auto Sales, Millions Units	Aug-16	Worse	16.9	17.8	-0.86	-0.2	-0.2	-0.5	1.3%	-2.2%		
	Gas Price	Aug-16	Better	2.16	2.20	-4.90%	-0.08	-0.01	0.04	-2.3%	-14.8%		
INVESTMENT	Industrial Production, YoY %	Aug-16	Worse	-1.1%	-0.5%	-0.57%	-0.4%	0.0%	0.1%	0.2%	-1.0%		
	Capacity Utilization	_	Worse	-1.1% 75.5	75.9	-0.57%	-0.4%	0.0%	-0.1	0.6%	-1.0%		
	Durable Goods New Orders, YoY %	Aug-16 Jul-16	Better	-3.4%	-6.7%	3.28%	-0.1	-2.1%	-2.4%	-2.6%	5.4%		
	Capital Goods - NonDefense Ex-Air, YoY %	Jul-16 Jul-16	Worse	-4.9%	-3.5%	-1.42%	-0.8%	-0.8%	-0.8%	-0.9%	-0.1%		
	ISM Mfg	Aug-16	Worse	49.4	52.6	-3.20	-0.8%	-0.8%	-0.8	-0.9%	0.0		
	ISM Mfg - New Orders	Aug-16 Aug-16	Worse	49.4 49.1	56.9	-7.80	-5.2	-6.4	-3.8	-0.8	1.3		
	ISM Mfg - Employment	Aug-16 Aug-16	Worse	49.1	49.4	-1.10	-5.2	-0.4	-0.5	-3.2	-2.0		
	ISM Ring - Employment ISM Services	Aug-16 Aug-16	Worse	51.4	55.5	-4.10	-3.1	-3.0	-3.7	-0.6	-4.8		
	ISM Services - New Orders	Aug-16 Aug-16	Worse	51.4	60.3	-8.90	-5.1	-5.7	-6.0	-2.2	-4.5		
	ISM Services - Employment	Aug-10 Aug-16	Worse	50.7	51.4	-0.70	-0.9	-0.6	-2.5	-0.8	-6.7		
	Mfg & Trade Inventories, YoY %	Jul-16	Better	0.5%	0.5%	0.0%	-0.1%	-0.3%	-0.8%	-0.3%	-1.8%		
	Business Inventories I/S Ratio	Jul-16 Jul-16	Worse	1.39	1.39	0.00	-0.1%	-0.3%	-0.7%	-0.5%	0.7%		
	Busiless inventories 1/3 Rado	Jui-10	worse	1.39	1.39	0.00	-0.3%	-1.090	-0.790	-0.576	0.776		
	Housing Starts	Aug-16	Worse	1142	1212	-70	-41	-16	-15	1.5%	1.8%		
INVESTMENT (Residential)	New Home Sales	Jul-16	Better	654	582	72.0	51	81	116	13.8%	34.4%		
	MBA Purchase Apps	Aug-16	Worse	217	228	-11.1	-10	-12	-5	-4.9%	10.0%		
	NAHB Survey of Home Builders	Aug-16	Better	59	58	1.0	0.0	0.5	-0.8	-0.2	-2.2		
	FHFA HPI, NSA YoY %	Jun-16	Worse	5.6%	5.7%	-0.16%	-0.2%	-0.3%	-0.3%	_	-		
	Case-Shiller 20-City HPI, YoY %	Jun-16	Worse	5.1%	5.3%	-0.13%	-0.1%	-0.3%	-0.2%	-	-		
GOVERNMENT	Construction Spending, YoY %	Jul-16	Worse	1.5%	2.0%	-0.5%	-0.6%	-3.8%	-6.9%	-1.6%	-12.5%		
	Monthly Budget Balance, Bil \$'s	Jui-16 Aug-16		-1.5% -107.1	-112.8	5.7	-0.6%	-3.8%	-6.9%	-130.03	-69.12		
	Monuny Budget Balance, Bit \$ s	Aug-10	Better	-10/.1	-112.8	5.7	-30	-02	-03	-130.03	-07.12		
EXTERNAL	International Trade Balance, Bil \$'s	Jul-16	Better	-39.5	-44.7	5.18	2.6	1.7	2.2	-5.4%	-5.7%		
										43	LIEDOEVE		

Dividing the economy into Services & Goods, here's how August looked: Goods = Contraction Services = worst print since 2010.

Let's consider data breadth.

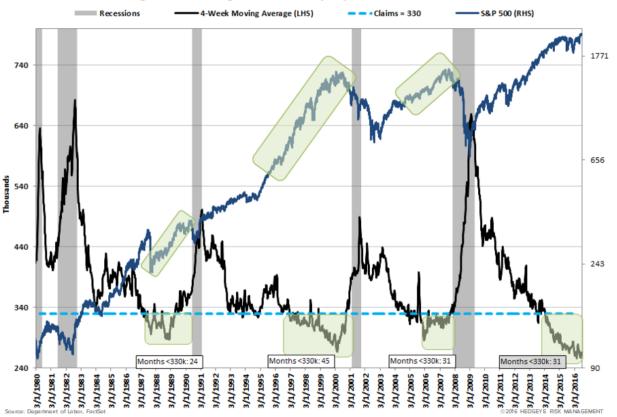
The Tale of the Aug Tape:

- Chicago PMI = Worse
- 2. ISM Services = Worse
- 3. ISM manuf. = Worse
- 1. Markit Manuf. PMI = Worse
- 5. Bbg Cons. Conf. = Worse
- 6. NFP = Worse
- 7. ISM New York = Worse
- 8. Auto Sales = Worse
 - . Labor Mkt Cond. = Worse
- 10. Retail Sales = Worse
- 11. Housing Starts = Worse
- 12. Exist. Home Sales = Worse
- 13. Industrial Prod. = Worse

Source: Bloomberg, BLS, BEA, Census, NAR

LABOR IS LONG IN THE TOOTH

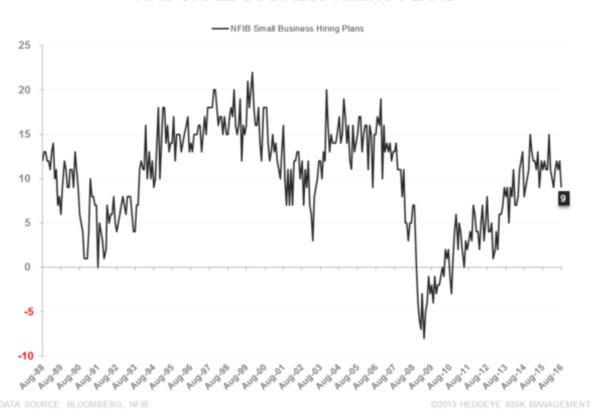
Long Term Rolling Initial Unemployment Claims & Recessions



The last three cycles have seen initial jobless claims fall below 330k and remain below that level for 24 months, 45 months and 31 months, respectively. That works out to an average of 33 months. The current cycle is now entering its 32nd month below 330k indicating that we've eclipsed the late 1980s expansion and the 2000s expansion and we're now ~12 months away from tying the 1990s expansion in duration.

LABOR IS LONG IN THE TOOTH

NFIB SMALL BUSINESS HIRING PLANS

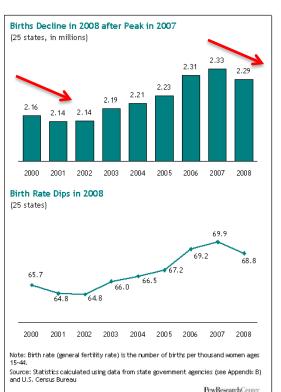


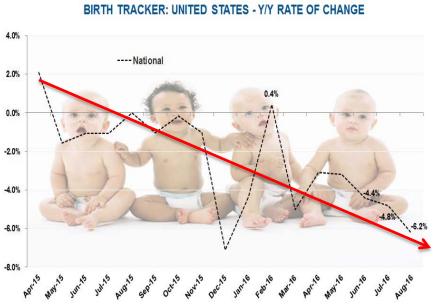
Meanwhile, small business hiring plans appear to be slowing.

Bear in mind,
Small Businesses
represent ~99% of total
U.S. Employer firms,
~50% of total Private
Sector Employment
and ~60% of net private
sector hiring on a
monthly basis.

The trend in small business hiring, confidence and investment spending remains critical to aggregate trends in employment and economic activity. In short, it still matters.

THE CURIOUS CASE OF THE MATERNITY SLOWDOWN





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There's another interesting sign of slowdown occurring and that is that maternity rates nationwide have been slowing over the last six months.

Historically, maternity rates decline amid recessionary periods. The Pew chart to the left shows the reductions in birth rates that followed the 2000 and 2007 prerecessionary peaks.

DATA SOURCE: HEDGEYE MATERNITY TRACKER

MEANWHILE, THE MARKET'S VALUATION IS STRETCHED



It's worth mentioning that on a CAPE Ratio (Shiller P/E) basis, the market is at 26.9x and is trading above valuation levels seen 95% of the time over the last 135 years.

AQR has analyzed the prospective market returns in the decade following various levels of CAPE valuation and has found that when the market is in the 10th decile, as it is today, the expected forward real return is just 0.5% per year for the next decade.

CYCLE PERFORMANCE STUDIES - FINS SUBSECTORS

Hedgeye Financials Sub-Sector Performance Across the Market Cycle (1991-2002) Early Cycle Mid Cvcle Late Cycle (Jan 91 -(Dec 94 -(Nov 98 -

Nov 98)

E-Brokers Services Homebuilders **Small Cap Banks** Large Cap Banks Traditional AM Auto Insurers Mid Cap Banks I-Banks/Boutiques Life Insurers MI / Fin Guaranty Insurance Brokers P&C Insurers Mortgage Finance **Consumer Finance**

Dec 94)

E-Brokers Cards Large Cap Banks Mid Cap Banks Traditional AM I-Banks/Boutiques Services Auto Insurers Life Insurers Small Cap Banks MI / Fin Guaranty Homebuilders P&C Insurers Insurance Brokers Consumer Finance Mortgage Finance

Homebuilders Insurance Brokers Mortgage Finance **Small Cap Banks** Traditional AM Services E-Brokers MI / Fin Guaranty I-Banks/Boutiques Consumer Finance Mid Cap Banks P&C Insurers Large Cap Banks **Auto Insurers** Cards Life Insurers

Oct 02)

We were curious whether certain subsectors of Financials were consistent underperformers / outperformers based on different points in the cycle.

This is the output of the first of three cycles that we evaluated. It covers the 1991-2002 period. We divided the Early / Mid / Late cycle bins evenly and compared performance. Cards were one of the best mid-cycle performers and one of the worst late-cycle. Note, there was no early cycle performance to evaluate due a lack of

Source: Hedgeye, Factset

CYCLE PERFORMANCE STUDIES – FINS SUBSECTORS

Hedgeye Financials Sub-Sector Performance Across the Market Cycle (2003-2009)

Early Cycle Mid Cycle Late Cycle (Nov 02 - (Dec 04 - (Jan 07 - Dec 04) Jan 07) Feb 09)

Debt Collectors Traditional AM Consumer Finance Homebuilders Mortgage Finance Cards Services Small Cap Banks E-Brokers I-Banks/Boutiques Fin Tech **P&C Insurers** Reinsurers Life Insurers Large Cap Banks MI / Fin Guaranty Auto Insurers Mid Cap Banks Insurance Brokers Exchanges

Exchanges I-Banks/Boutiques Fin Tech E-Brokers Consumer Finance Traditional AM Services Life Insurers Large Cap Banks P&C Insurers Insurance Brokers Auto Insurers MI / Fin Guaranty Reinsurers Mortgage Finance Mid Cap Banks Cards Small Cap Banks Homebuilders **Debt Collectors**

Insurance Brokers Fin Tech Services P&C Insurers Auto Insurers Small Cap Banks I-Banks/Boutiques Exchanges Mortgage Finance Debt Collectors E-Brokers Traditional AM Consumer Finance Mid Cap Banks Large Cap Banks Life Insurers Homebuilders

Cards

MI / Fin Guaranty

Reinsurers

This is the output of the second of three cycles that we evaluated. It covers the 2003-2009 period. Cards were one of the better early-cycle performers, but performed poorly midcycle and were the second worst overall subsector late cycle.

It's interesting to note that cards were the second worst overall performer in both the previous cycle and this cycle.

CYCLE PERFORMANCE STUDIES – FINS SUBSECTORS

Hedgeye Financials Sub-Sector Performance Across the Market Cycle (2009-2017E) Early Cycle Mid Cycle Late Cycle (Mar 09 - (Jan 12 - (Nov 14 - Jan 12) Nov 14) Sep 17E)

Debt Collectors Cards Mortgage Finance Services Traditional AM Consumer Finance Life Insurers MI / Fin Guaranty Mid Cap Banks Homebuilders Exchanges Fin Tech Large Cap Banks P&C Insurers Auto Insurers Small Cap Banks Insurance Brokers Reinsurers E-Brokers I-Banks/Boutiques

MI / Fin Guaranty Fin Tech Debt Collectors Mortgage Finance Services Cards Life Insurers Exchanges E-Brokers Homebuilders Traditional AM Large Cap Banks I-Banks/Boutiques Mid Cap Banks Small Cap Banks P&C Insurers Auto Insurers Insurance Brokers Reinsurers Consumer Finance Exchanges Services Fin Tech P&C Insurers Auto Insurers Insurance Brokers Small Cap Banks Reinsurers Mid Cap Banks Consumer Finance E-Brokers Life Insurers Large Cap Banks Homebuilders MI / Fin Guaranty Cards I-Banks/Boutiques Traditional AM Mortgage Finance

Debt Collectors

In this final assessment. we've taken some creative liberty. Namely, we've assumed that the cycle lasts one more year. This was a necessary assumption in order to divide the cycle into even thirds and analyze performance. For reference, the 1990s cycle lasted 9 years, the 2000s cycle lasted 6 years, and our assumption is that this cycle lasts 8 years. Interestingly, cards were the second best performing sector early cycle, top-third midcycle and thus far are bottom quartile late cycle.

THE RE-EMBRACE OF SUBPRIME

THE WALL STREET JOURNAL.

Banks' Bet on Consumers is

Getting Riskier

Lenders are girding for an increase in loan losses as they

cast a wider net for borrowers

By ANNAMARIA ANDRIOTIS

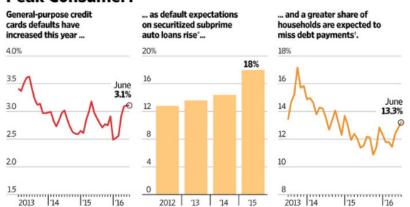
July 22, 2016 5:12 p.m. ET



Lenders including J.P. Morgan Chase & Co., Wells Fargo & Co., Capital One Financial Corp. and Discover Financial Services said on earnings calls this month that they have bolstered their reserves—in some cases for the first time in years—to prepare for an uptick in loan losses.

...executives warn the long boom in credit quality has peaked.

Peak Consumer?



*Among six large subprime lenders *Average probability of missing at least one debt payment over the following three months Sources: S&P/Experian (credit card default rates); DBRS (securitized auto loans); Federal Reserve Bank of New York survey (debt payments)

THE WALL STREET JOURNAL.

In a classic date with density, lenders began re-embracing subprime borrowers a few years back and now the signs of stress are beginning to show.

http://www.wsj.com/articles/banks-bet-on-consumers-is-getting-riskier-1469221959



CAPITAL ONE (COF)

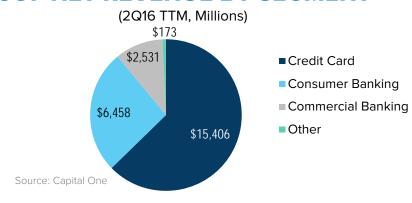
CAPITAL ONE: COMPANY OVERVIEW

SEGMENTS

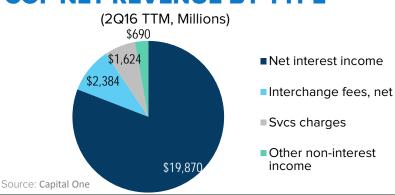
- Credit Card—consumer and small business card lending
- Consumer Banking

 —Auto
 Finance, Home Loans, Branchbased lending and deposit
 gathering
- Commercial Banking—Lending and deposit gathering to commercial customers with annual revenues between \$10M and \$1B.

COF NET REVENUE BY SEGMENT



COF NET REVENUE BY TYPE

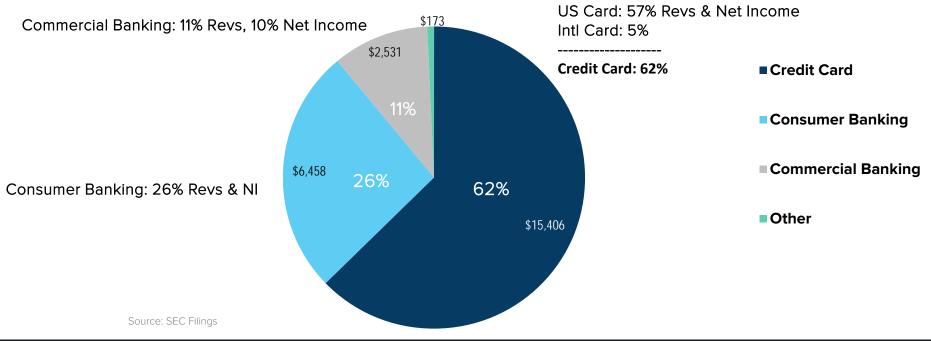




CAPITAL ONE: COMPANY OVERVIEW

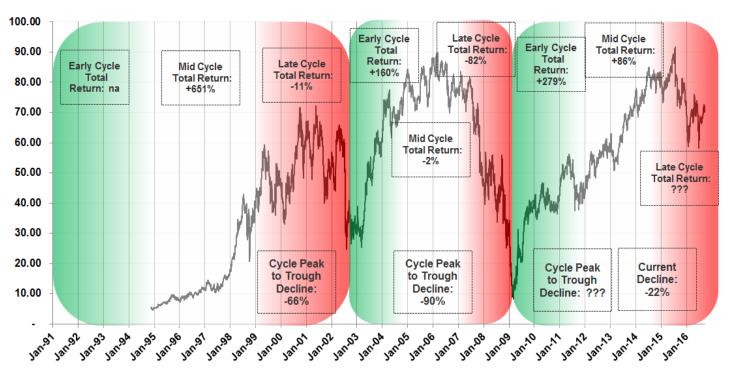
COF NET REVENUE BY SEGMENT

(2Q16 TTM, Millions)



CYCLE PERFORMANCE – CAPITAL ONE (COF)

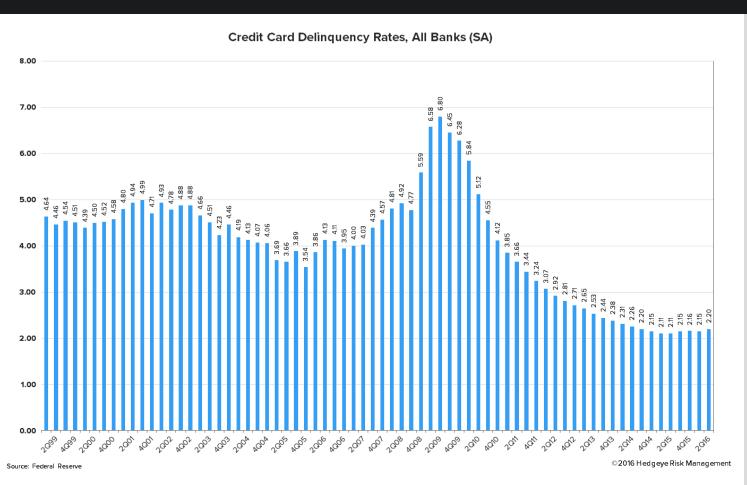
CAPITAL ONE (COF) STOCK PRICE (1991-PRESENT)



Capital One offers a fascinating look at the cyclical performance nature of credit card stocks having come public in 1994 and being a monoline card company until the mid-2000s. Peak to trough declines in the last two cycles have been -66% and -90%, and the stock is currently down **-22%** from its mid-2015 peak. Late cycle returns in the last two cycles were -11% and -82%.

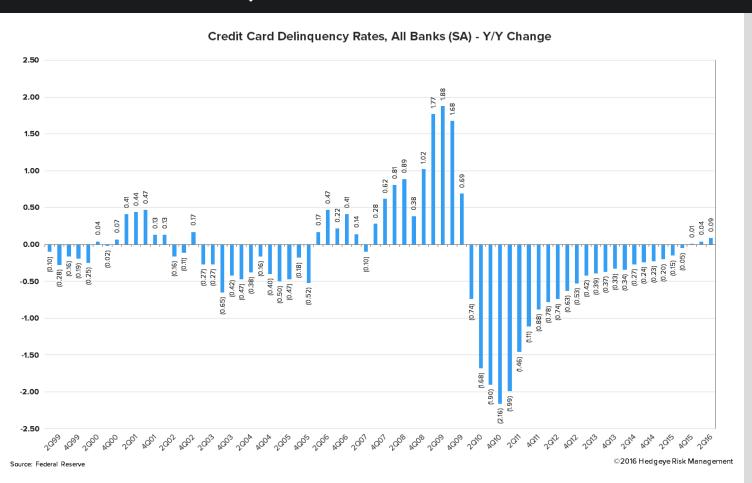
DATA SOURCE:FACTSET ©2016 HEDGEYE RISK MANAGEMENT

CYCLE PERFORMANCE – CREDIT CARD LOANS



Here's a snapshot of the longer-term trend in credit card delinquency rates – this is Fed data for all US banks. The data is seasonally adjusted.

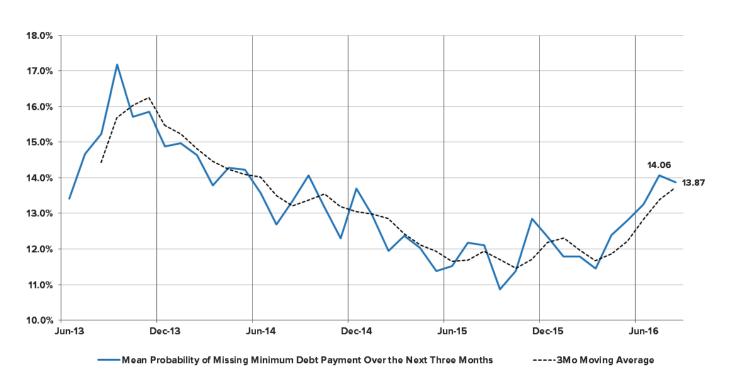
MIGHTY OAKS, FROM LITTLE ACORNS GROW



The turn has finally begun with delinquency rates just starting to peak above zero for the first time this cycle in the last few quarters. While the magnitude of the move isn't overly impressive as yet, this is how all previous cycles have looked at their twilight.

MIGHTY OAKS, FROM LITTLE ACORNS GROW

Mean Probability of Missing Minimum Debt Payment Over the Next Three Months



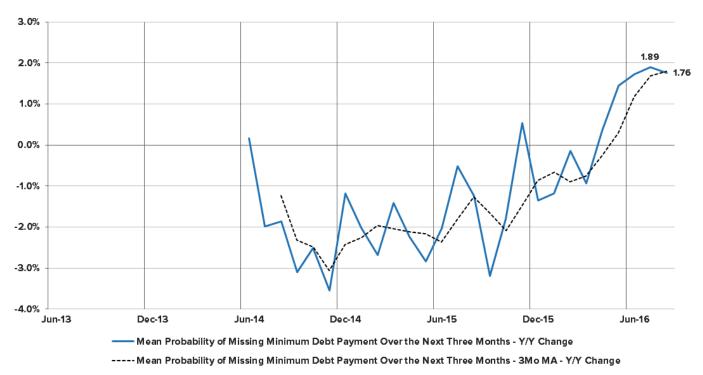
The Fed's Survey of
Consumer Expectations
showed a recent
upswing in the
percentage of
respondents who said
they would be unable to
make minimum
payments on certain of
their debt obligations in
the next three months.

The percentage rose from the 11-12% range in 2015 to ~14% as of the latest readings.
Considering that DQ rates are still near all-time lows for most card issuers, this is certainly cause for concern.

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MIGHTY OAKS, FROM LITTLE ACORNS GROW

Mean Probability of Missing Minimum Debt Payment Over the Next Three Months Y/Y Change



Here's the Y/Y change in the previous chart. The trend has been accelerating since mid-2015.

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WHEN RICH SPEAKS, WE SHOULD LISTEN... OR SHOULD WE?

Rich Fairbank—Capital One Financial Corporation—Chairman, CEO

Okay well let me—Gary, let me make the comment because I know it's on people's mind and investor's mind. Let me make the comment about the American consumer for a second. And before we call things seams or anything else let me just talk about the American consumer that we see and what that means for credit prospects. Gary, in terms of the mechanics of how things like bankruptcy spikes and the aftermath of the anti-spike and all those kind of things. And the various things that you see from an accounting point of view maybe you could comment on that?

The one can't tell—particularly we can't tell—particularly we can't tell because we have a number of years ago Nigel and I were accused by our largest investor, they called us Doctor Doom and Doctor Gloom — I don't remember which he was and which I was. Say why do you call us that? Because you always talk with such caution about the economy and yes we always assume recession starts tomorrow and Manheim indexes in the auto business get worse and everything else. That's kind of who we are.

We can't help when we read the paper and we see certain things that go on be concerned by the things that we all see of rising rates and energy prices and potential housing bubble and things like that. I don't really have any bigger insight to give you than you already have about those things. I don't consider us to be experts on this.

We do have one of the world's largest, probably most accurate, most real-time database windows into the American consumer that anybody has in the world and what I want to do is just again reflect on what we see and what the implications of that are.

To state the obvious charge-offs are incredibly strong. Charge-offs are strikingly strong and — but if we want to have the best sense of what's happening to those we look at the predictive indicator—the early warning signs relative to charge-offs and there are really three. There's delinquencies. There's roll rates which is the rate at which from one delinquency bucket to the next, customers, the rate at which they go from one bucket to the next and is flat as a pancake in the context of being very robust so that's—we encourage.

When we look at payment—when we look at payment rates, Payment rat

But sort of beyond that there still is a bit of a rise in terms of payment rates. And the interesting thing is what does that mean? From our experience, our view of slightly rising payment rates, is that this is an indication of the liquidity of the American consumer and a good thing. But that's a slight effect but we like to see increases in payment rates as a general observation.

The other big one and the one that's creating the most news in The Wall Street Journal everyday relates to what we call purchase volume. But, of course, it shows up in terms of retailer sales, one disappointment after the next as we've seen over these quarterly announcements from the retailers.

Capital One is seeing a boom in purchase volume but we have to get our mix effect separated out from the economy effect. We see a boom in purchase volume mostly because of the boom in our rewards business. But when we're been coming to you quarter after quarter and comparing our purchase volume versus a year ago it has generally been up 16 to 18% quarter over year-ago quarter. This quarter it was up 16% and so it was a little bit less and it was a little bit under our own forecast of what it would be.

So I think we are seeing a bit of that effect that the retailers are seeing in spades. The big difference between them and us is for the retailers that is their business. That's their revenue item. For us it doesn't make very much impact on our P&L what the purchase volume is. The relevance of changes in purchase volume really would be a linkage to if there were a lot less of it which means a lot less consumer spending which if it led companies to end up cutting back, laying off people so that you had a recession, that's of course where our real economics is driven by that. That certainly is a possibility. We don't see any indicators in our little window into the business but that would be where we would have concern as opposed to any effects directly from this.

The other thing in this window on top of that in this window on top of that in this window that we look at is the most puzzling phenomenon of bankruptcies. Half of it is just extra charge-offs.

What we find when we look into this window of our bankruptcy spike and we are struggling for an explanation of this effect.

There's one of two things going on basically. One interpretation is that there's probably one of three things going on and which one it is makes a big difference. One is that this is a structural change caused by the law and the difficulty of going bankrupt and that people are just going to be getting better. And we have refused to recognize that as a possibility in terms of our projections.

We assume things return to normal levels either—they either return—the bankruptcies go to normal levels or it shows up as a substitution effect in going charge-offs the old-fashioned way with contractual charge-offs. Again our struggle is we have not seen that effect.

The second possibility is there's nothing really going on other than a lag effect but the lag effect but the lag effect is taking longer than everybody believed because it's harder to navigate through the bankruptcy laws and various things so we're just in the same way there was a pull forward effect there could be a delayed effect in terms of the resumption of the bankruptcy effect or its equivalent. We are puzzled by the fact that we do not see our delinquencies which is a precursor to contractual charge-offs rising even while bankruptcies stay low. So again — but that could be the second effect. The third effect could be that really there's just an overall more positive consumer out there which is showing up in better bankruptcies, better contractuals, better all this stuff and that while we keep looking for some effect of pull forwards and so on it's just a maybe a better consumer than we had given them credit for.

The net of all of this is that this window we look into is a very positive window right now. We still assume the worst. We not only assume that recession starts tomorrow morning. We also take all of our data that we're looking at in the rearview mirror at this spectacular bankruptcy period

and everything else and force that to be normal before we overlay all the other negative things. We do this on every decision. We do it even corporately as Gary projects his numbers going out. Sorry, that was a long answer but it's really quite an amazing window into this business. Gary?

RICH FAIRBANKS: THE THINGS TO WATCH FOR ON CREDIT QUALITY

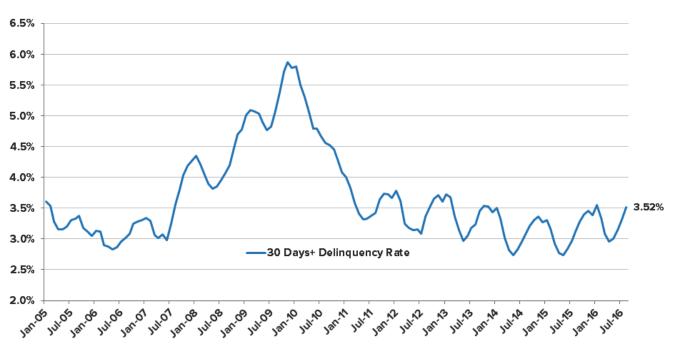
- Rising Delinquencies
- Rising Roll Rates

These comments were made at a Sell Side Luncheon, July 28, 2006

Rising Bankruptcies

US CARD CREDIT QUALITY → LOOKS GOOD ...



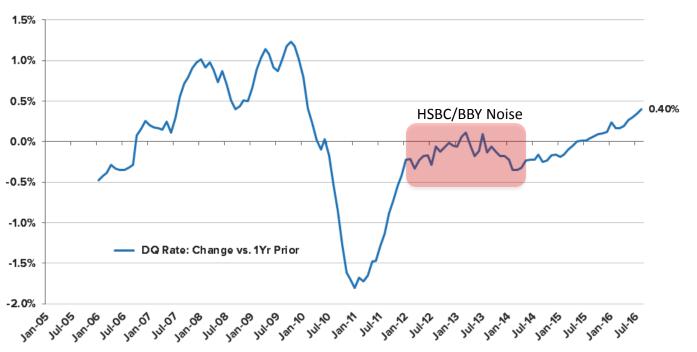


At first glance, there's nothing especially remarkable about Capital One's credit quality situation. 30+day delinquency rates in the US Card book are at 3.52% as of August, which is generally in-line with the 3.0-3.5% range they've been in since 2013.

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US CARD CREDIT QUALITY → LOOKS GOOD ... OR DOES IT?

Capital One US Card 30 Days+ Delinquency Rate (YoY Change)



Delinquency rates are seasonally impacted and tend to rise late in the year and fall early in the year. As such, one needs to look at them on a Y/Y basis for a more accurate depiction of what's really happening. Post recession, credit quality was a major tailwind, and remained a steady tailwind in the 2012-2014 period. Since early-2015, however, credit costs have been growing steadily. You'd have to go back to Spring, 2007 to find the last time credit costs were growing as quickly.

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COF: A SNAPSHOT OF THE CONSUMER BUSINESSES

Capital One Credit Metrics

US Card	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	MoM Change	QoQ Change	YoY Change
DQ%	3.12%	3.28%	3.40%	3.46%	3.39%	3.55%	3.34%	3.09%	2.96%	3.01%	3.14%	3.32%	3.52%	20 bps	38 bps	40 bps
NCO %	3.07%	3.12%	3.38%	3.88%	3.98%	4.04%	4.14%	4.31%	4.29%	3.99%	3.94%	3.81%	3.72%	-9 bps	-31 bps	65 bps
EOP Balance (\$M)	\$81,851	\$82,178	\$82,844	\$84,718	\$87,939	\$86,380	\$84,367	\$84,561	\$85,667	\$87,211	\$88,581	\$89,615	\$91,161	1.7%	2.9%	11.4%
International Card	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	MoM Change	QoQ Change	YoY Change
DQ%	2.71%	2.81%	2.87%	2.90%	2.98%	3.25%	3.43%	3.32%	3.22%	3.15%	3.24%	3.31%	3.30%	-1 bps	6 bps	59 bps
NCO %	2.55%	0.15%	2.57%	2.79%	3.04%	3.00%	3.12%	3.54%	3.37%	3.64%	3.56%	3.63%	3.64%	1 bps	11 bps	109 bps
EOP Balance (\$M)	\$8,037	\$7,957	\$8,184	\$8,220	\$8,186	\$7,807	\$7,870	\$8,138	\$8,599	\$5,447	\$8,323	\$8,272	\$8,276	0.0%	-0.6%	3.0%
Auto	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	MoM	Q ₀ Q	YoY
DQ%	6.05%	6.10%	6.08%	6.30%	6.69%	6.54%	5.26%	5.14%	4.99%	5.48%	5.59%	5.80%	5.97%	Change 17 bps	Change 38 bps	Change -8 bps
NCO %	1.89%	1.94%	2.10%	2.03%	2.17%	2.27%	1.32%	1.19%	0.95%	1.18%	1.47%	1.72%	1.93%	22 bps	62 bps	4 bps
EOP Balance (\$M)	\$40,695	\$41,052	\$41,242	\$41,344	\$41,549	\$41,786	\$41,928	\$42,714	\$43,349	\$43,806	\$44,502	\$44,978	\$45,692	1.6%	2.7%	12.3%
Total	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	MoM Change	QoQ Change	YoY Change
DQ%	4.01%	4.13%	4.20%	4.30%	4.37%	4.45%	3.95%	3.75%	3.62%	3.88%	3.92%	4.10%	4.28%	18 bps	36 bps	27 bps
NCO %	2.67%	2.57%	2.93%	3.23%	3.37%	3.44%	3.20%	3.28%	3.18%	3.08%	3.13%	3.14%	3.15%	1 bps	2 bps	49 bps
EOP Balance (\$M)	\$130,583	\$131,187	\$132,270	\$134,282	\$137,674	\$135,973	\$134,165	\$135,413	\$137,615	\$136,464	\$141,406	\$142,865	\$145,129	1.6%	2.6%	11.1%

Source: SEC Filings. Hedgeye Risk Management

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DELINQUENCIES & NCO'S ARE RISING AT AN ACCELERATING RATE

- The credit situation in US Card is deteriorating with 30+ Delinquency rates +40 bps Y/Y, NCO rates +65 bps Y/Y.
- The credit situation in International Card is also deteriorating with 30+ Delinquency rates +59 bps Y/Y, NCO rates +109 bps Y/Y.
- The credit situation in Auto Finance is stable with 30+ Delinquency rates -8 bps Y/Y, NCO rates +4 bps Y/Y.

CREDIT DETERIORATION -> IT'S NOT JUST CAPITAL ONE

Credit Card Metrics Summary																
Net Charge-Offs	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	MoM Change	QoQ Change	YoY Change
Capital One	3.07%	3.12%	3.38%	3.88%	3.98%	4.04%	4.14%	4.31%	4.29%	3.99%	3.94%	3.81%	3.72%	(9 bps)	(31 bps)	65 bps
Discover	2.00%	2.20%	2.10%	2.30%	2.20%	2.30%	2.40%	2.20%	2.50%	2.40%	2.30%	2.20%	2.10%	(10 bps)	(25 bps)	10 bps
American Express	1.30%	1.20%	1.40%	1.50%	1.40%	1.40%	1.40%	1.50%	1.50%	1.60%	1.30%	1.60%	1.60%	-	13 bps	30 bps
JPMorgan	2.51%	2.21%	2.22%	2.28%	2.37%	2.36%	2.27%	2.44%	2.50%	2.44%	2.23%	2.26%	2.21%	(5 bps)	(16 bps)	(30 bps)
Bank of America	2.53%	2.44%	2.57%	2.42%	2.63%	2.64%	2.63%	2.79%	2.74%	2.73%	2.54%	2.45%	2.43%	(2 bps)	(23 bps)	(10 bps)
Citi	2.55%	2.29%	2.27%	2.54%	2.53%	2.47%	2.68%	2.65%	2.36%	2.81%	2.17%	2.31%	2.61%	30 bps	1 bps	6 bps
Average	2.33%	2.24%	2.32%	2.49%	2.52%	2.53%	2.59%	2.65%	2.65%	2.66%	2.41%	2.44%	2.45%	1 bps	(13 bps)	12 bps
30+ Delinquencies	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	MoM Change	QoQ Change	YoY Change
Capital One	3.12%	3.28%	3.40%	3.46%	3.39%	3.55%	3.34%	3.09%	2.96%	3.01%	3.14%	3.32%	3.52%	20 bps	38 bps	40 bps
Discover	1.60%	1.70%	1.70%	1.70%	1.70%	1.80%	1.70%	1.70%	1.60%	1.60%	1.60%	1.70%	1.80%	10 bps	20 bps	20 bps
American Express	0.90%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	0.90%	0.90%	1.10%	1.10%	1.10%			20 bps
JPMorgan	1.12%	1.17%	1.21%	1.23%	1.19%	1.20%	1.20%	1.17%	1.15%	1.12%	1.12%	1.13%	1.09%	(4 bps)	(3 bps)	(3 bps)
Bank of America	1.59%	1.65%	1.68%	1.72%	1.68%	1.68%	1.65%	1.60%	1.55%	1.50%	1.49%	1.48%	1.49%	1 bps		(10 bps)
Citi	1.40%	1.50%	1.57%	1.56%	1.53%	1.56%	1.55%	1.55%	1.47%	1.44%	1.47%	1.45%	1.50%	5 bps	3 bps	10 bps
Average	1.62%	1.72%	1.76%	1.78%	1.75%	1.80%	1.74%	1.69%	1.61%	1.60%	1.65%	1.70%	1.75%	5 bps	10 bps	13 bps
Stock Performance	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	MoM Change	YTD Change	YoY Change
Capital One	77.75	72.52	78.90	78.51	72.18	65.62	65.73	69.31	72.39	73.24	63.51	67.08	71.60	7%	(1%)	(8%)
Discover	53.73	51.99	56.22	56.76	53.62	45.79	46.42	50.92	56.27	56.81	53.59	56.84	60.00	6%	12%	12%
American Express	76.72	74.13	73.26	71.64	69.55	53.50	55.58	61.40	65.43	65.76	60.76	64.46	65.58	2%	(6%)	(15%)
JPMorgan	64.10	60.97	64.25	66.68	66.03	59.50	56.30	59.22	63.20	65.27	62.14	63.97	67.50	6%	2%	5%
Bank of America	16.34	15.58	16.78	17.43	16.83	14.14	12.52	13.52	14.56	14.79	13.27	14.49	16.14	11%	(4%)	(1%)
Citi	53.48	49.61	53.17	54.09	51.75	42.58	38.85	41.75	46.28	46.57	42.39	43.81	47.74	9%	(8%)	(11%)
Average of Credit Card Issuers														7%	(1%)	(3%)
S&P 500	1972	1920	2079	2080	2044	1940	1932	2060	2065	2097	2099	2174	2171	(0%)	6%	10%
XLF	19.03	18.40	19.55	19.94	19.35	17.64	17.13	18.27	18.93	19.29	18.56	19.20	19.94	4%	3%	5%

Source: SEC Filings. Hedgeye Risk Management

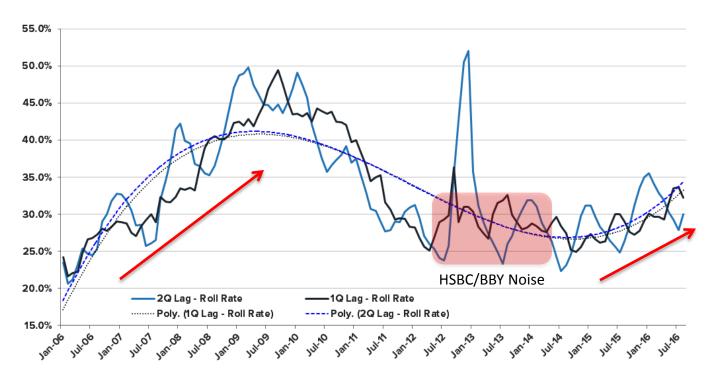
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DELINQUENCIES & NCO'S ARE RISING AT A MAJORITY OF ISSUERS

Credit quality is now deteriorating at four (COF, DFS, AXP, C) of the big six card issuers, with DQs and NCOs up Y/Y.

CREDIT QUALITY → ROLL RATES

Capital One US Card DQ => NCO Roll Rates



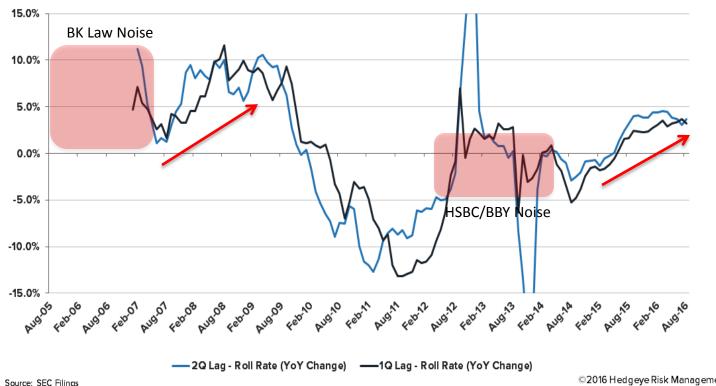
Roll rates are an important analytical tool for determining whether there's greater flow-through from early stage delinquencies to later stage delinquencies, and ultimately to charge-offs. In other words, rising roll rates are an early warning sign of credit deterioration.

This chart shows the flow through of US Card delinquencies to charge-offs on a 1Q and 2Q lag. We've added the polynomial trend line to illustrate the inflection that occurred ~12 months ago.

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CREDIT QUALITY → ROLL RATES





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This chart shows the Y/Y change in the data from the previous slide. There's a lot of noise in this series. Back in 2005 the bankruptcy laws changed which triggered a pull-forward effect and a subsequent drop-off the next year. In 2012 the data was distorted by the acquisition of HSBC's card book and the subsequent disposition of the Best Buy book. We've tried to clean the data up to show the underlying trends taking place. Rising trends in this chart indicate accelerating credit quality deterioration.

INTL CARD CREDIT QUALITY → WORSENING

Capital One International Card 30 Days+ Delinquency Rate



International card credit quality is showing clear signs of deterioration.

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INTL CARD CREDIT QUALITY -> WORSENING

Capital One International Card 30 Days+ Delinquency Rate (YoY Change)

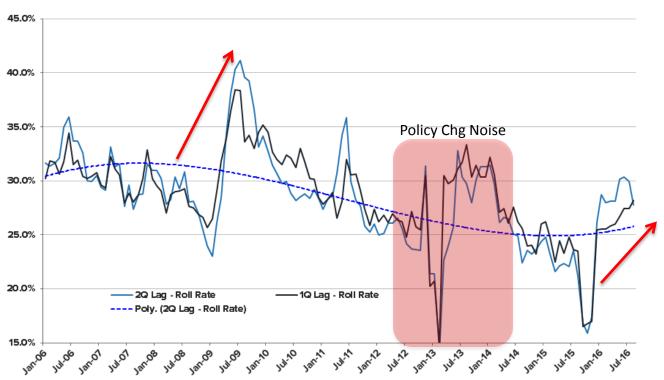


Looking at International card credit quality through the lens of YoY rate of change shows how much worse it's getting.

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CREDIT QUALITY → ROLL RATES



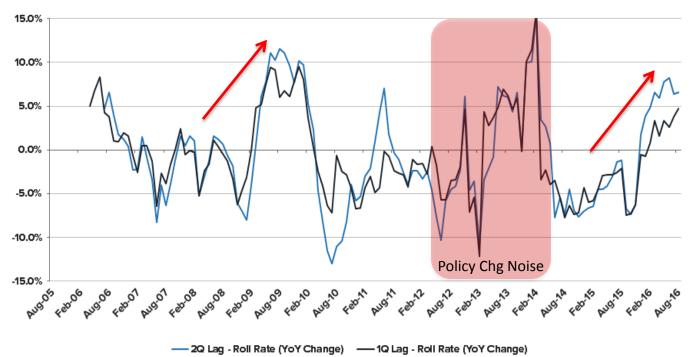


International card roll rates are also rising.

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CREDIT QUALITY → ROLL RATES

Capital One International Card DQ => NCO Roll Rates (YoY Change)



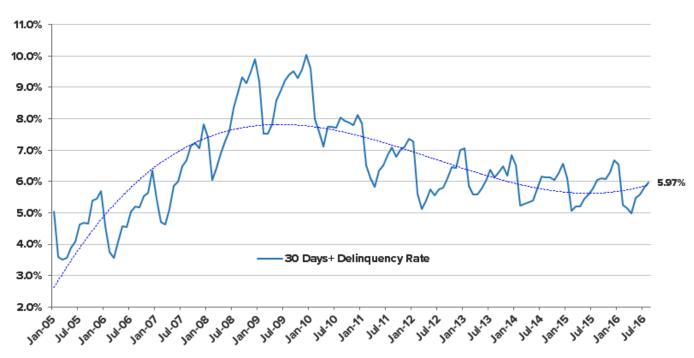
This chart illustrates the trend more clearly.

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Source: SEC Filings

AUTO FINANCE CREDIT QUALITY

Capital One Auto Finance 30 Days+ Delinquency Rate



Auto credit quality, while not yet deteriorating in a meaningful way, has ceased to be a tailwind.

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AUTO FINANCE CREDIT QUALITY

Capital One Auto Finance 30 Days+ Delinquency Rate (YoY Change)



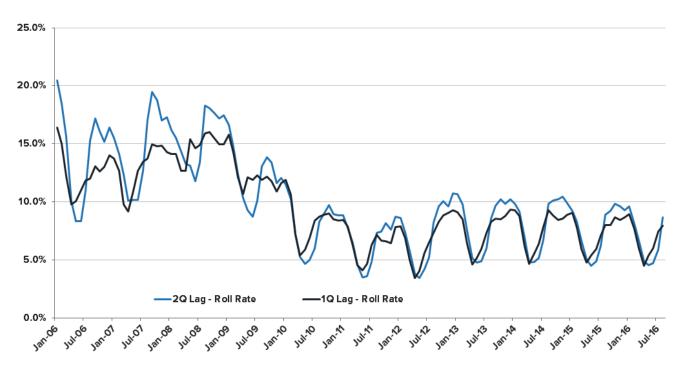
Auto Finance has reached the flattening point, but as we'll show in a bit, this is misleading.

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Source: SEC Filings

AUTO FINANCE → **ROLL RATES**

Capital One Auto Finance DQ => NCO Roll Rates

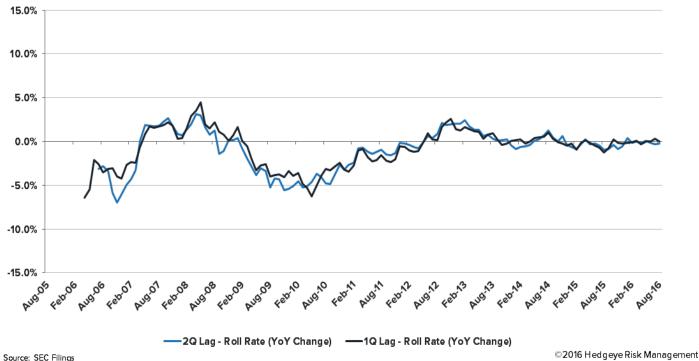


Roll rates in auto appear steady.

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AUTO FINANCE → **ROLL RATES**

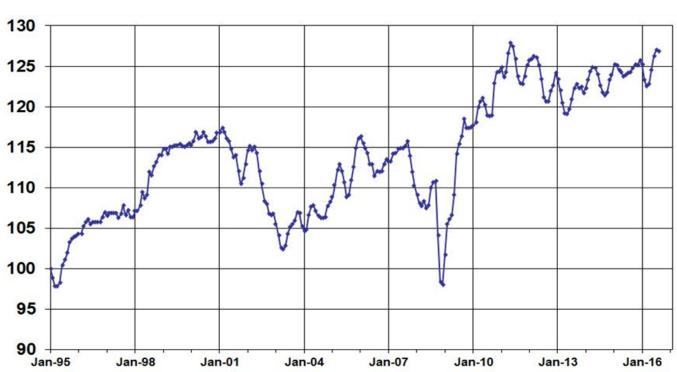
Capital One Auto Finance DQ => NCO Roll Rates (YoY Change)



Very steady.

USED CAR VALUES



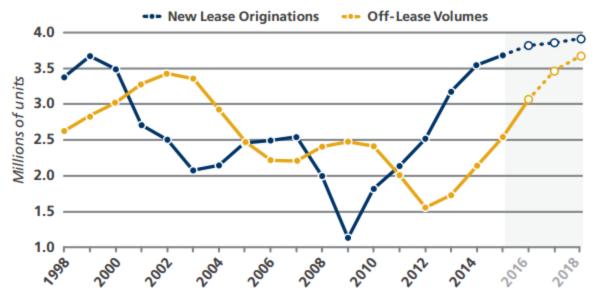


The Manheim Index shows that used car values are near an all-time high, which creates enormous risk to the downside for collateral/repos.

Source: Manheim Consulting ©2016 Hedgeye Risk Management

OFF-LEASE VOLUMES ARE GROWING STEADILY

OFF-LEASE VOLUMES — FURTHER GROWTH AHEAD



Source: Manheim Consulting

One of the major drivers, typically on a lag, of used car values is the number of cars coming off lease, i.e. the supply of used cars hitting the market. The supply of off-lease cars troughed in 2012-2013 and has been climbing rapidly since with sharp increases in both 2016 and 2017 and continuing through 2018.

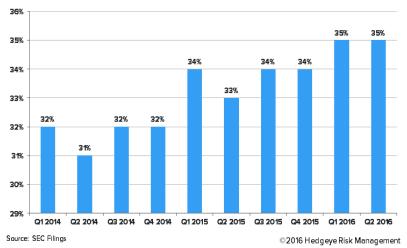
THE SUBPRIME GOLD RUSH AT CAPITAL ONE

Capital One Fi	nancial	Q1 2014	Q2 2014	Q3 2014	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016
Domestic	Greater Than 660	68%	69%	68%	68%	66%	67%	66%	66%	65%	65%
Credit Card-	660 Or Below	32%	31%	32%	32%	34%	33%	34%	34%	35%	35%
Refreshed	Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Auto- At	Greater Than 660	44%	45%	46%	47%	48%	49%	50%	51%	51%	51%
	621 - 660	17%	17%	16%	17%	17%	17%	17%	17%	17%	17%
Origination	620 Or Below	39%	38%	38%	36%	35%	34%	33%	32%	32%	32%
FICO Scores	Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Capital One Fi	nancial	FY 2013	FY 2014	FY 2015
Domestic	Greater Than 660	69%	68%	66%
Credit Card-	660 Or Below	31%	32%	34%
Refreshed	Total	100%	100%	100%
Auto- At	Greater Than 660	42%	47%	51%
Origination	621 - 660	17%	17%	17%
FICO Scores	620 Or Below	41%	36%	32%
rico scores	Total	100%	100%	100%

Source: SEC Filings

Capital One Share of US Card Loans that are Subprime

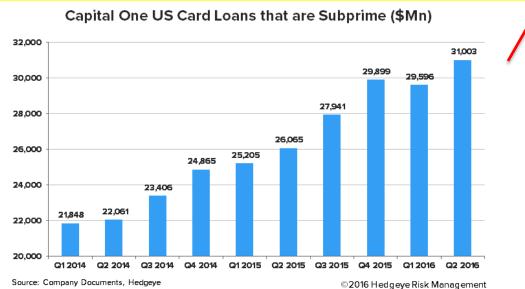


Capital One has reembraced the subprime borrower in the US card business in the last few years, taking the share of sub-660 loans to 35% in 2Q16, up from 31% in 2Q14.

DANGER ... DANGER

Capital One Financial	FY2013	Q1 2014	Q2 2014	Q3 2014	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	2Q16 vs 2Q14
US Card EOP Balance (\$mn)	73,255	68,275	71,165	73,143	77,704	74,131	78,984	82,178	87,939	84,561	88,581	
\$mn by FICO bucket												
Greater Than 660	50,546	46,427	49,104	49,737	52,839	48,926	52,919	54,237	58,040	54,965	57,578	
660 Or Below	22,709	21,848	22,061	23,406	24,865	25,205	26,065	27,941	29,899	29,596	31,003	
Y/Y Growth \$ Total					4,449	5,856	7,819	9,035	10,235	10,430	9,597	17,416
Greater Than 660					2,293	2,499	3,815	4,500	5,201	6,038	4,658	8,474
660 Or Below					2,156	3,357	4,004	4,535	5,034	4,392	4,939	8,942
Y/Y Growth %												
US Card EOP Balance (\$mn)					6.1%	8.6%	11.0%	12.4%	13.2%	14.1%	12.2%	24.5%
Greater Than 660					4.5%	5.4%	7.8%	9.0%	9.8%	12.3%	8.8%	17.3%
660 Or Below					9.5%	15.4%	18.1%	19.4%	20.2%	17.4%	18.9%	40.5%

Source: Company Documents, Hedgeye

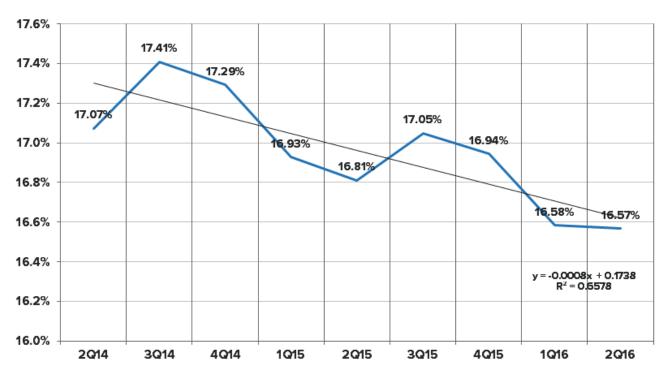


While the share stats on the previous slide are a bit alarming, they don't tell the whole story. You need to look at what that implies about actual dollars of subprime US card loan growth.

The stark reality is that Capital One has gone from \$21Bn in subprime US card loans in 1Q14 to \$31Bn in 2Q16. That's \$10Bn in growth in two years. Said differently, the company has grown its US subprime book 40% in the last two years.

WITH SO MUCH SUBPRIME GROWTH, WHY ARE MARGINS •

Capital One US Card Revenue Margin



© 2016 Hedgeve Risk Management

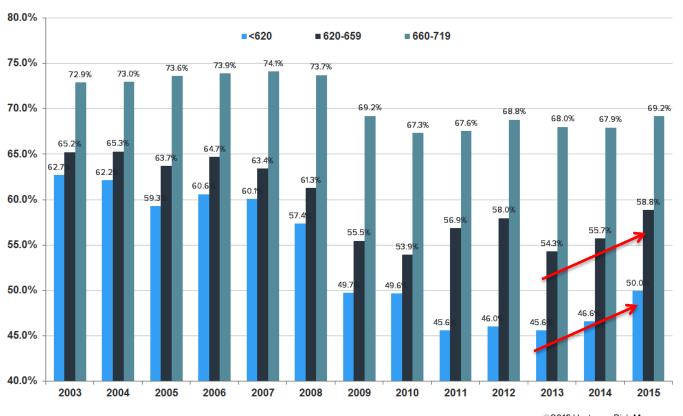
US card business have been trending lower by 8 bps per quarter for the last two years. What's remarkable/curious about this is the fact that the company has grown its US Card subprime book by 40% during the same period. Normally, when you bolt on a ton of subprime loans, your margin improves.

Revenue margins in the

Source: SEC Filings

THE BROADER SUBPRIME RE-EMBRACE

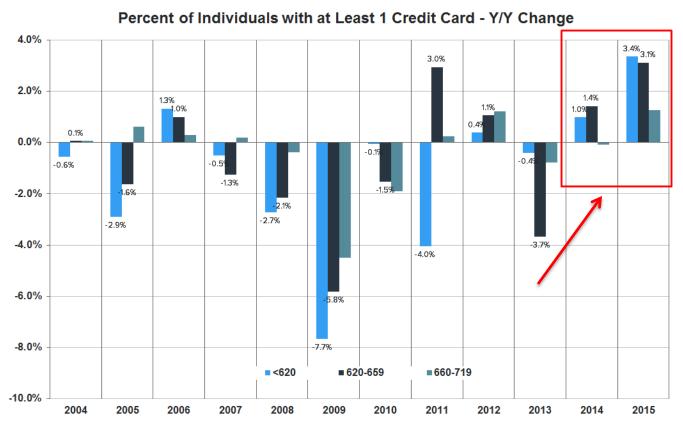
Percent of Individuals with at Least 1 Credit Card



According to NY Fed data, subprime has been the fastest growing category of US card loans in the last few years.

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THE BROADER SUBPRIME RE-EMBRACE



In fact, looking a the trends on a Y/Y basis, the growth in subprime US cards over the last two years is the fastest since at least 2004.

© 2016 Hedgeye Risk Management

Source: New York Fed Consumer Credit Panel / Equifax

BALANCE DETAILS

Data Source: NY Fed Consumer Credit Panel / Equifax

Credit Card Balance Distribution, by Credit Score, 2016Q2

	<620	620-659	660-719	720-779	780+
<\$500	24%	21%	25%	28%	39%
\$500-1000	16%	11%	9%	8%	12%
\$1000-5000	37%	35%	30%	28%	33%
\$5000-15000	16%	23%	23%	22%	13%
\$15000-30000	5%	7%	9%	10%	3%
\$30000+	2%	3%	4%	4%	1%
Total	100%	100%	100%	100%	100%
Midpoint	<620	620-659	660-719	720-779	780+
\$250	24%	21%	25%	28%	39%
\$750	16%	11%	9%	8%	12%
\$2,500	37%	35%	30%	28%	33%
\$10,000	16%	23%	23%	22%	13%
\$22,500	5%	7%	9%	10%	3%
\$40,000	2%	3%	4%	4%	1%
	<620	620-659	660-719	720-779	780+
\$250	\$60	\$52	\$61	\$69	\$97
\$750	\$121	\$84	\$64	\$60	\$88
\$2,500	\$923	\$871	\$758	\$701	\$831
\$10,000	\$1,644	\$2,305	\$2,306	\$2,214	\$1,273
\$22,500	\$1,017	\$1,590	\$2,028	\$2,192	\$598
\$40,000	\$734	\$1,271	\$1,791	\$1,760	\$286
Average	\$4,499	\$6,173	\$7,009	\$6,996	\$3,173

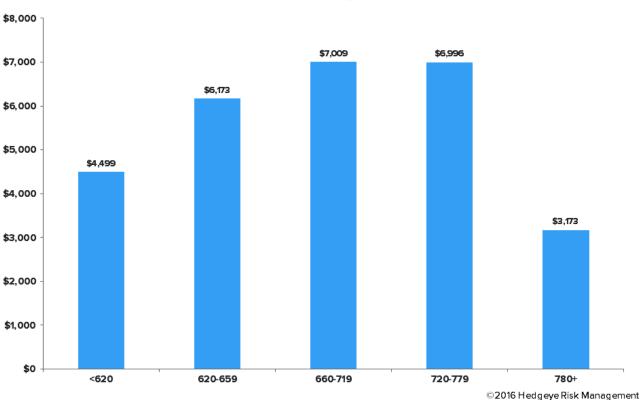
Source: New York Fed Consumer Credit Panel / Equifax

One of the surprising things about the subprime borrowers is that many of them carry relatively large balances.

^{*} Credit score is Equifax Riskscore

BALANCE DETAILS

Credit Card Balance Distribution, by Credit Score, 2016Q2

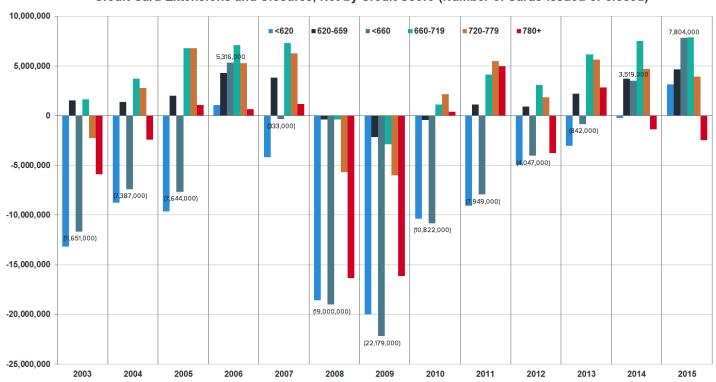


We've interpolated the Fed's histogram to try and understand average balances by credit score bucket. Surprisingly, the deep subprime bucket (sub-620) and the traditional subprime bucket (620-659) carry average balances not dissimilar from prime borrowers. This means the risk of these borrowers is greater than what's generally understood.

Source: New York Fed Consumer Credit Panel / Equifax, Hedgeye

CREDIT EXTENSIONS



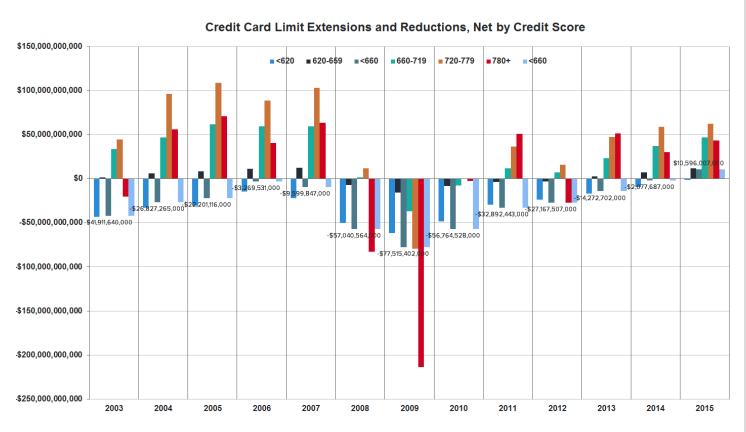


The net extension of card credit (number of cards) to deep subprime and traditional subprime borrowers put up its fastest year on record in 2015.

© 2016 Hedgeye Risk Management

Source: New York Fed Consumer Credit Panel / Equifax

CREDIT EXTENSIONS



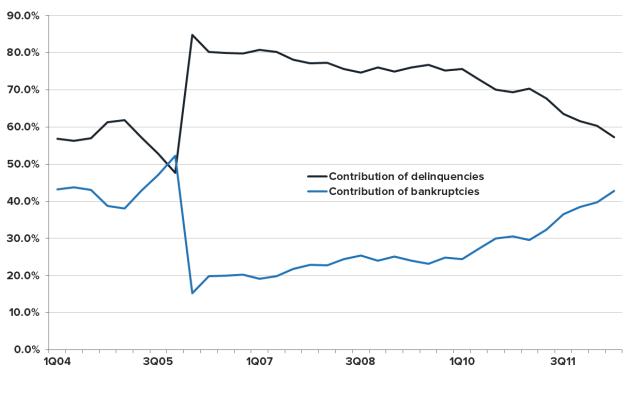
It's interesting that total net extensions of subprime card credit system-wide totaled \$10.6bn in 2015 and in that same year, Capital One alone grew subprime card receivables by \$5bn.

©2016 Hedgeye Risk Management

Source: New York Fed Consumer Credit Panel / Equifax

BANKRUPTCIES MATTER -> THE SPEAR OF DESTINY

Deconvolution of Multiple Regression:
Relative Contribution of Bankruptcies and Delinquencies to Total BofA Card NCOs



Now let's turn to bankruptcies and the roll they play for lenders.

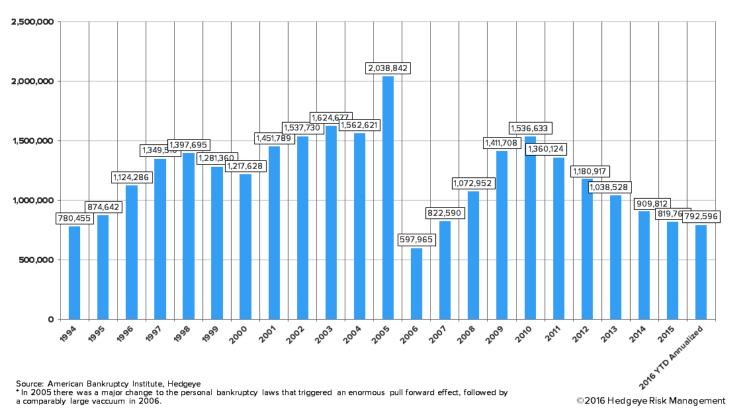
This is an analysis we ran a few years back to determine the share of credit card charge-offs being driven by delinquency vs the share being driven by bankruptcy at Bank of America.

Our conclusion is that typically ~40% of credit card net charge-offs are driven by bankruptcy filings.

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BANKRUPTCIES MATTER

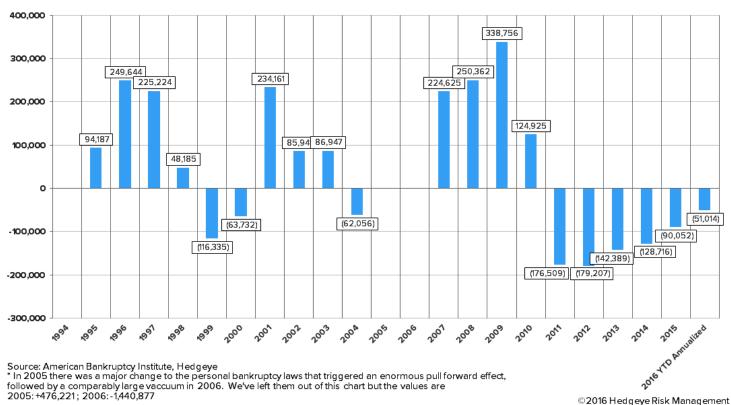
Total Annual Volume of Personal Bankruptcy Filings in the US



Personal bankruptcy filings have been declining steadily since 2010, generating an enormous credit quality tailwind for the card lenders.

BANKRUPTCIES MATTER

Total Annual Volume of Personal Bankruptcy Filings in the US - YoY Change



The Y/Y RoC in bankruptcies, however, is slowing and steadily converging towards zero. We expect that in 2017/2018 the number of bankruptcies will be unchanged Y/Y without a recession. With a recession, obviously the number will rise significantly.

2010 Heageye Klok Management

CAPITAL ONE – US CARD LOAN GROWTH HAS BEEN HOT

	2015 Year-over-Year Loan Growth				2015 Year-over-Year Purchase Volume Growth					
1.	Capital One	13.2%		1.	Capital One	18.2%				
2.	AMERICAN EXPRESS	5.3% ¹		2.	CHASE 🔾	6.5%				
3.	DISCOVER FINANCIAL SERVICES	3.1%		3.	AMERICAN EXPRESS	5.6%				
4.	CHASE 🕠	0.3%		4.	Bank of America	4.4%				
5.	citi	(0.6%)		5.	cîti	4.1%				
6.	Bank of America	(2.5%)		6.	DISCOVER FINANCIAL SERVICES	2.5%				

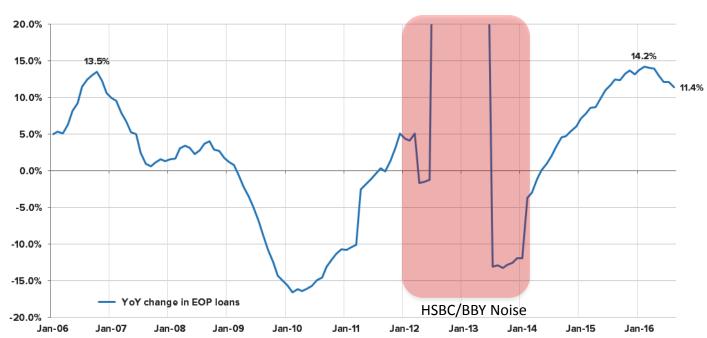
Capital One has been the fastest growing large card operator in the last few years.

Source: Company reports 2016 Annual Stockholder Meeting

Includes the Costco (\$13.8B) and JetBlue (\$1.1B) portfolios, which AmEx moved to held-for-sale ("HFS") in Q4'15. Excluding the HFS portfolio, AmEx declined 12.2%.
 Note: Capital One is domestic card; AmEx is their legacy USCS segment and includes credit and charge card. Citi includes Branded and Retail; JPM Chase is reported under Card, Merchant Services, and Auto; B of A is U.S. Consumer Credit Card; Discover is Credit Card

CAPITAL ONE US CARD LOAN GROWTH





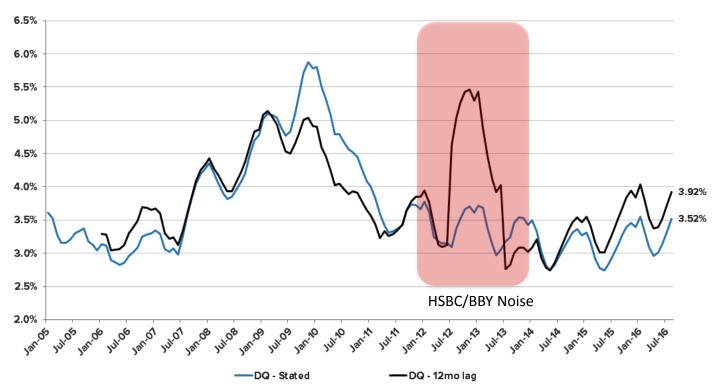
US Card loan growth at Capital One hit +14% in early 2016 – the fastest rate in last decade, notwithstanding the HSBC deal in 2012.

© 2016 Hedgeye Risk Management

Source: SEC Filings

CAPITAL ONE US CARD LOAN GROWTH





© 2016 Hedgeye Risk Management

The Denominator

Effect → When lagged

metrics are lower than

coincident metrics,

growth is having an

impact on current

period loss rates.

– Fitch

1 Item

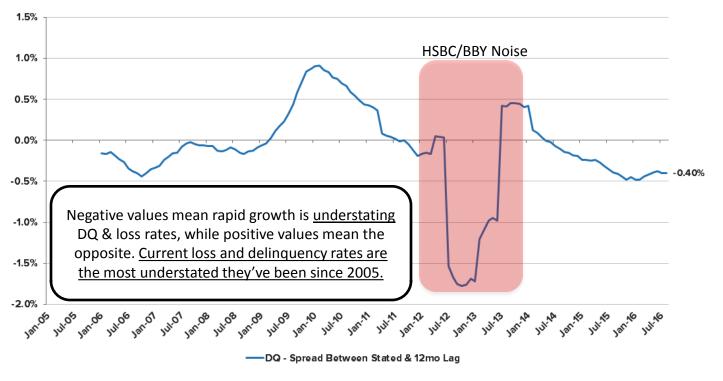
In periods of rapid growth, delinquency and net charge-off rates are understated (black line exceeds blue line), and in periods of contraction the opposite holds as well.

In other words, the deteriorating credit metrics we just reviewed appear better than they actually are.

Source: SEC Filings

CAPITAL ONE US CARD LOAN GROWTH





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The Denominator

Effect → When lagged

metrics are lower than

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– Fitch

In periods of rapid growth, delinquency and net charge-off rates are understated (black line exceeds blue line), and in periods of contraction the opposite holds as well.

In other words, the deteriorating credit metrics we just reviewed appear better than they actually are.

Source: SEC Filings, Hedgeye

INSIDER BEHAVIOR – CAPITAL ONE (COF)



Capital One last saw insider buying activity in early 2013. Insider selling ramped up sharply in the 2014-2015 period, but has been more muted since.

INTEREST RATE SENSITIVITY: COF

Change in	Affect on Net
Interest Rates	Interest Income
+200 bps	1.70%
+100 bps	1.90%
+50 bps	1.40%
-50 bps	-1.90%



Source: COF 2Q16 10-Q

Interest Rate Sensitivity Analysis (1)(2)

	Prev	vious Methodolo	ogy	Revised Methodology				
	June 30, 2016	March 31, 2016	December 31, 2015	June 30, 2016	March 31, 2016	December 31, 2015		
Estimated impact on projected base-line net interest income								
+200 basis points	3.8%	3.5%	2.6%	1.7%	1.3%	0.3%		
+100 basis points	2.5	2.2	1.6	1.9	1.5	0.8		
+50 basis points	1.7	1.4	0.9	1.4	1.2	0.6		
-50 basis points	(2.0)	(2.1)	(1.6)	(1.9)	(1.9)	(1.4)		
Estimated impact on economic value of equity								
+200 basis points	(0.1)	(2.6)	(5.2)	0.3	(3.0)	(4.8)		
+100 basis points	1.8	0.2	(1.5)	1.8	(0.1)	(1.3)		
+50 basis points	1.4	0.6	(0.4)	1.4	0.4	(0.3)		
-50 basis points	(2.8)	(1.7)	(0.6)	(2.6)	(1.4)	(0.6)		

⁽¹⁾ The information contained in this slide is preliminary and based on data available at the time of the earnings presentation. Investors should refer to our Quarterly Report on Form 10-Q for the period ended June 30, 2016 once it is filled with the Securities and Exchange Commission.

Rate sensitivity is a definite potential positive for Capital One, but we remain skeptical that the Fed will actually raise rates.

⁽²⁾ In Q2 2016, we updated our projected deposit re-pricing assumptions as part of our regular evaluation and assessment of the assumptions and models used to measure our interest rate sensitivity. The above table includes our interest rate sensitivity impacts to both projected base-line net interest income and economic value of equity under our previous and revised methodologies for the periods presented.

CAPITAL ONE: OTHER CHALLENGES

SOME OF THE CHALLENGES FACING CAPITAL ONE IN THE QUARTERS AHEAD

Consumer Banking Highlights:

- Loans +1% y/y
- Revenue -2% y/y
- Non-interest Expense +1% y/y
- Provision +10% y/y
- Pretax Income -12% y/y
- 30-day DQ Rates up

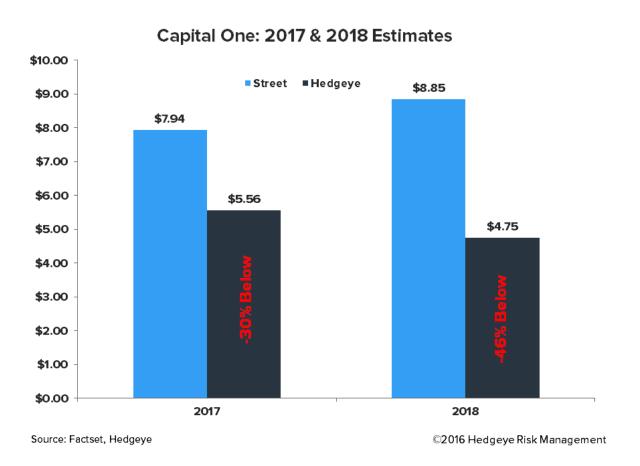
Commercial Banking Highlights:

- Similar dynamic / Pretax income -20% Y/Y
- Taxi Medallion Exposures
- Oil & Gas Exposures
- Hibernia / Flooding?

Other Considerations:

- 3Q16 Charge for \$50mn for rewards
- Growing 2H16 pressure on consumer banking business (auto loan revenue margin falling while NCOs are rising)
- Expect higher non-interest expenses in 2H16 (branch optimization and FDIC expenses)
- Interchange pressures
- Seasonality-related earnings challenges in the back half

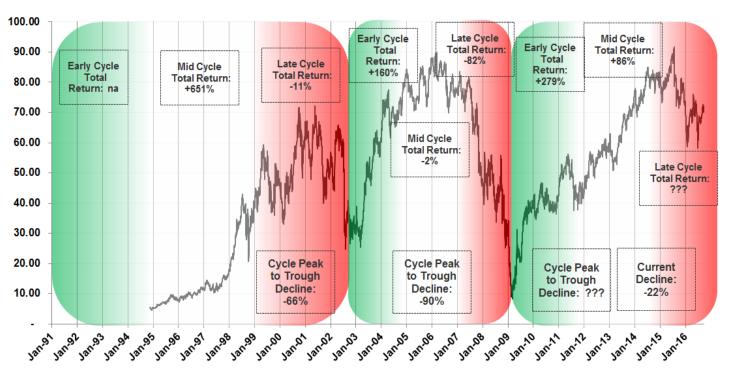
HERE'S WHERE WE SEE 2017/2018 SHAKING OUT



We're well below the Street for 2017 and 2018.

CYCLE PERFORMANCE – CAPITAL ONE (COF)

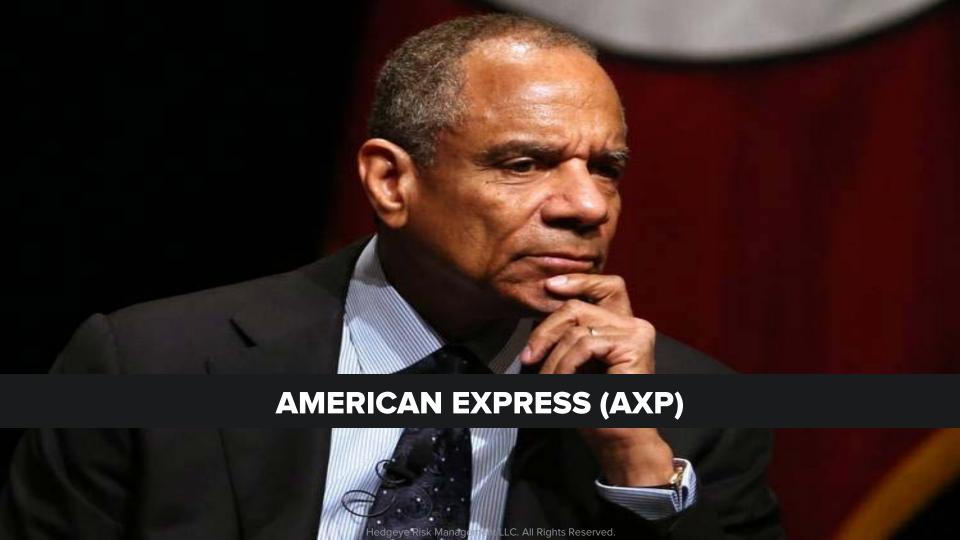
CAPITAL ONE (COF) STOCK PRICE (1991-PRESENT)



fascinating look at the cyclical performance nature of credit card stocks having come public in 1994 and being a monoline card company until the mid-2000s. Peak to trough declines in the last two cycles have been -66% and -90%, and the stock is currently down **-22%** from its mid-2015 peak. Late cycle returns in the last two cycles were -11% and -82%.

Capital One offers a

DATA SOURCE-FACTSET ©2016 HEDGEYE RISK MANAGEMENT



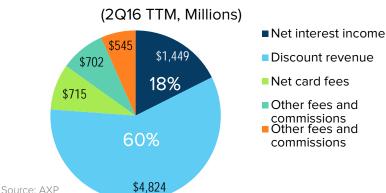
AMERICAN EXPRESS: COMPANY OVERVIEW

SEGMENTS

- U.S. Consumer Services
- International Consumer and Network Services
- Global Commercial Services
- Global Merchant Services



AXP REVENUE BY TYPE

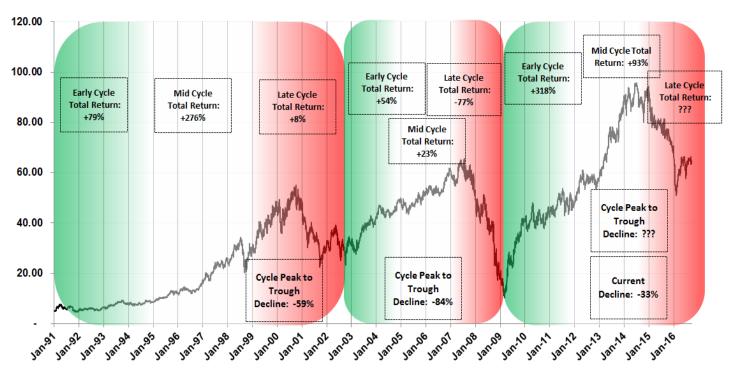


AXP NET REVENUE BY SEGMENT



CYCLE PERFORMANCE - AMERICAN EXPRESS (AXP)

AMERICAN EXPRESS (AXP) STOCK PRICE (1991-PRESENT)

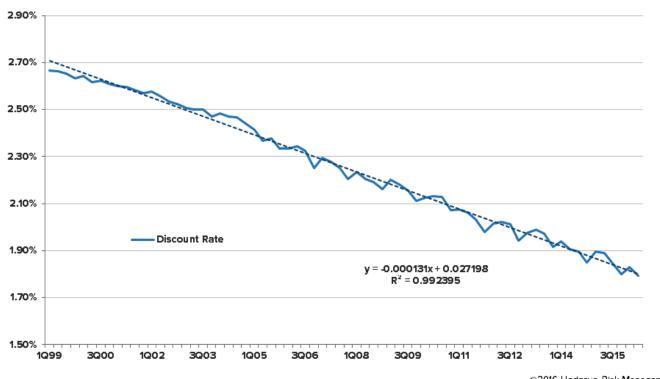


DATA SOURCE:FACTSET ©2016 HEDGEYE RISK MANAGEMENT

American Express offers an interesting case study in credit card cycle performance. In the last two cycles the stock has seen peak-totrough declines of -59% and -84%, respectively, while generating total return of +8% and -77% in the "late cycle" (final third) portion of the last two cycles. Currently the stock has declined by -33% from its mid-2014 peak in the mid-\$90s.

One thing to note is that in the early 1990s,
American Express was a more diversified
Financial Services company.

American Express Discount Rate (1999-Present)



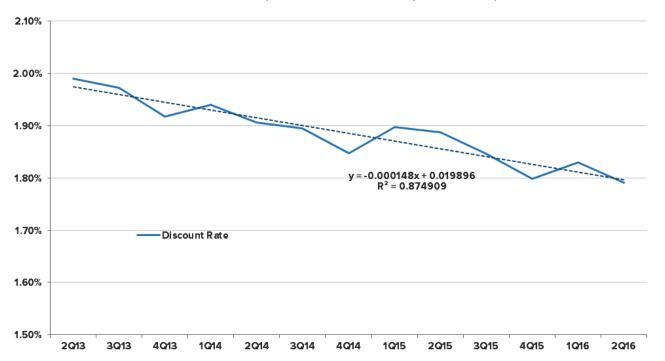
The Discount Rate at Amex is the key and it's been steadily declining for 16 years.

The decay has averaged 1.3bps/Q since 1999.

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Source: SEC Filings

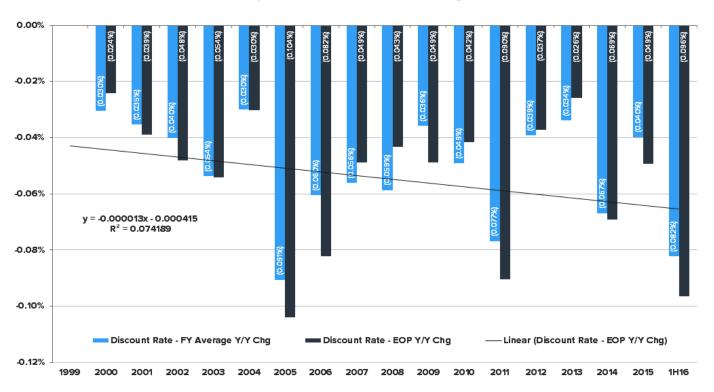
American Express Discount Rate (2Q13-2Q16)



Source: SEC Filings

In the last 3 years, the decay has sped up to 1.5bps/Q.

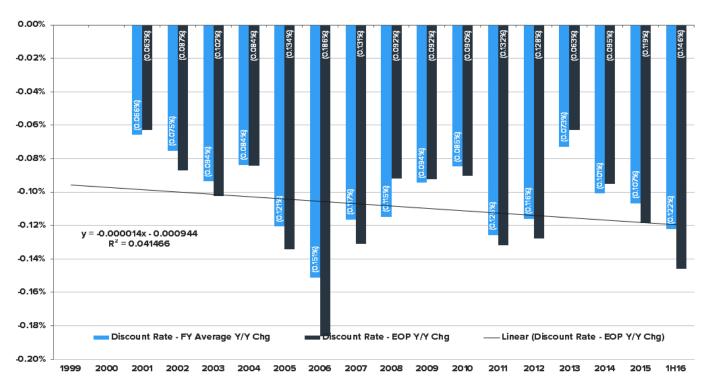
American Express Discount Rate Y/Y Change



Amex has gone from losing 4bps of Discount Rate per year to losing over 6bps per year. In the first half of 2016, they've lost 8-10bps Y/Y.

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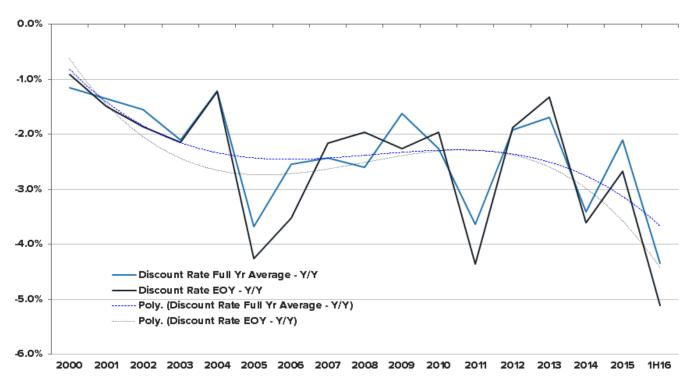
American Express Discount Rate Y/Y Change -2YR Rolling Basis



On a 2yr rolling basis, it looks a little worse.

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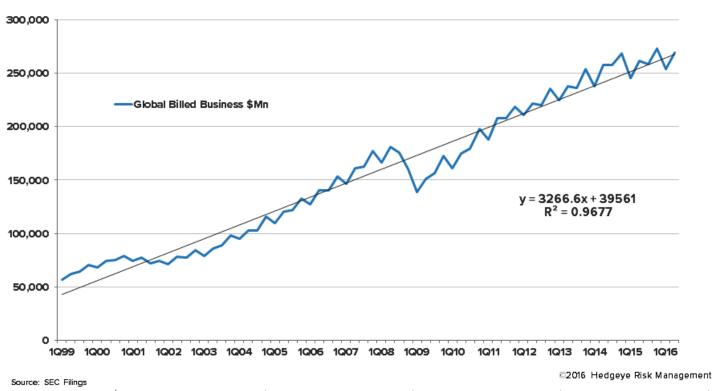
American Express Discount Revenue Headwinds



This chart shows what the decaying discount rate means for revenue headwinds. The company is now facing top-line headwinds from discount rate compression in the 3-5% range, up from 2-3% just a few years ago.

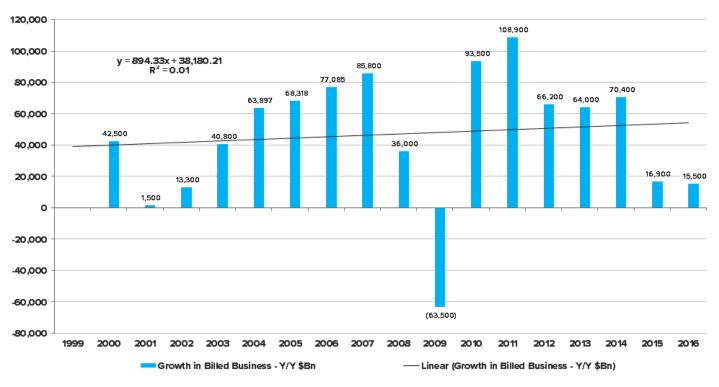
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American Express has grown billed business at an incredibly linear rate in dollar terms. That, however, is precisely the problem.

American Express Global Billed Business Growth - Y/Y Change \$Mn

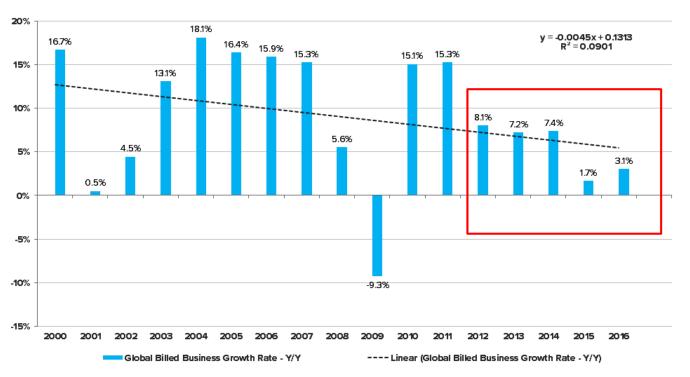


Dollar growth has been relatively steady.

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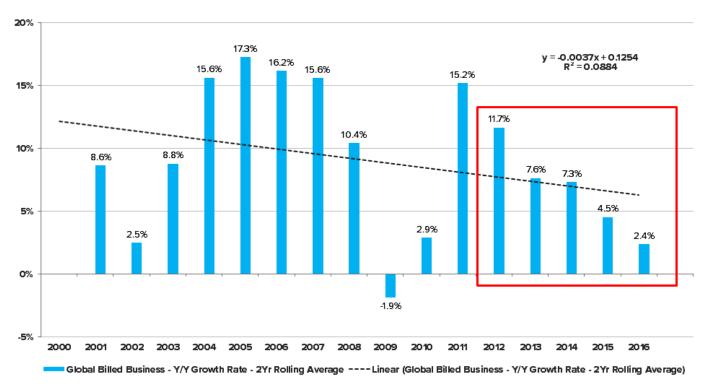
Source: SEC Filinas, Hedaeve

American Express Global Billed Business Growth - Y/Y Change



From a rate of change standpoint, however, growth is slowing signficantly.

American Express Global Billed Business Growth - Y/Y Change (2Yr Rolling Average)



This is even more evident on a 2yr rolling basis.

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AMERICAN EXPRESS – CONVERGING TO ZERO

HERE'S THE BIG PICTURE CHALLENGE FACING AMEX

Global Discount Rate

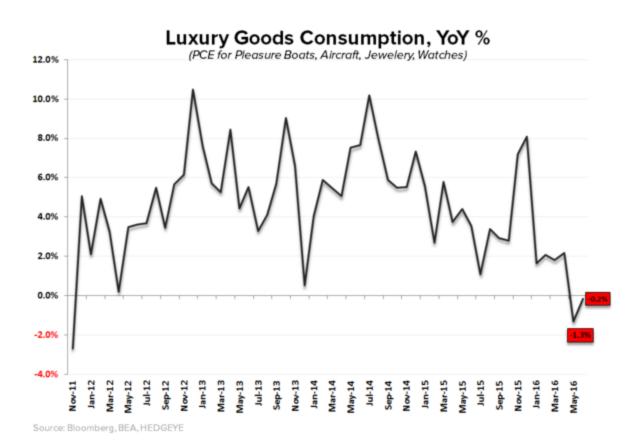
- Declined by 1.3 bps/Q from 1999-2016
- Declined by 1.5 bps/Q from 2Q13-2Q16
- The discount rate decline is accelerating to the downside at a rate of 0.13-0.14 bps/year.
- Adding all of this up, revenue headwinds from discount rate compression are now 3-5%/year, up from 2-3% a few yrs ago.
- Here's the key thing to understand:
 - The Discount Rate is compressing at an accelerating rate and that is against a SHRINKING DENOMINATOR.
 - This means revenue headwinds are growing at an accelerating rate.

Global Billed Business:

- GBB grew at a remarkably linear rate in dollar terms (+\$13Bn/Qtr) from 1999-2016 with little volatility.
- Steady dollar growth, however, translates into a shrinking growth rate on a growing denominator.
- The last five years (2012-2016) of Global Billed Business growth have averaged 5.5% amid a global expansion.
- Compare that to the 5yr period of 2003-2007 when growth averaged 15.8%.
- Growth in the last two years has averaged just 2.4%. We don't consider Costco an add-back.

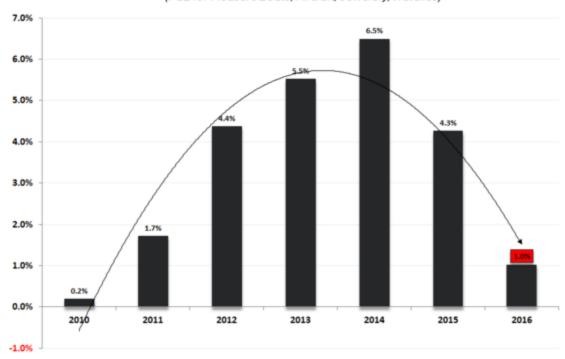
Discount Revenue Outlook

- Discount Revenue still accounts for 60% of revenue at American Express and has long been the growth engine.
- We're approaching a point in time when Global Billed Business growth will merely offset Discount Rate compression, leading to zero revenue growth.
- Consider the last two years. Revenue headwinds from Discount Rate compression = -7.8%; Global Billed Business Growth = +4.7%
- Looking further ahead, Discount Revenue will likely enter a permanent decay phase within a few years.
- Amex looks cheap at 11x LTM Earnings, but with zero top line growth, the multiple will compress further.



Luxury Goods Consumption is in decline.

Luxury Goods Consumption, YoY % (PCE for Pleasure Boats, Aircraft, Jewelery, Watches)

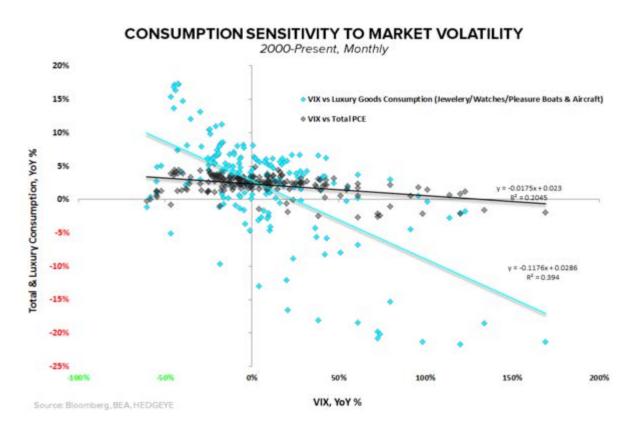


Source: Bloomberg, BEA, HEDGEYE

Thus far, 2016 is showing an incredible slowdown in the luxury market.



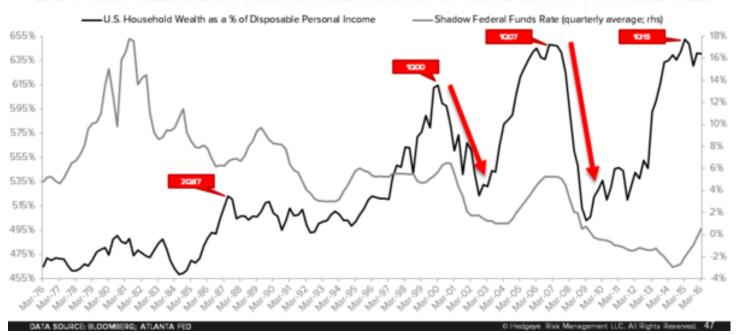
Tiffany's is one poster child.



Rich people hate volatility.

YET ANOTHER HEADWIND TO RETAIL...

ON AN ECONOMY-WIDE BASIS, THE "WEALTH EFFECT" IS IN THE PROCESS OF ROLLING OFF ITS 1015 CYCLE PEAK. HOW DESPERATE WILL THE FED BE TO PREVENT THE BLACK LINE FROM CORRECTING IN VIOLENT FASHION AS IT HAS OVER THE PREVIOUS TWO STOCK MARKET CYCLES?



The Fed is the last stronghold.

INSIDER BEHAVIOR – AMERICAN EXPRESS (AXP)



American Express saw significant insider selling in the 2003-2007 period and again in 2013 and 2014, both of which were followed by sharp declines in the stock. There continues to be insider selling at the company with only two insider buys since 2011.

INTEREST RATE SENSITIVITY: AXP

+100 BPS INCREASE IN RATES



-\$216 million affect on NTM net interest income

American Express would not benefit from rates rising.



Source: AXP 2015 10-K



DISCOVER FINANCIAL (DFS)

DISCOVER: COMPANY OVERVIEW

Direct Banking



- ▶ Discover-branded credit cards
- ▶ Student loans
- ▶ Home equity loans
- ► Deposit products

Payment Services



► ATM, debit and electronic funds transfer network



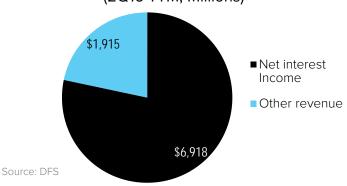
▶ A global payments network

Network Partners Business

Provides payment transaction processing and settlement services on the Discover network

DFS NET REVENUE BY TYPE

(2Q16 TTM, Millions)



DFS NET REVENUE BY SEGMENT

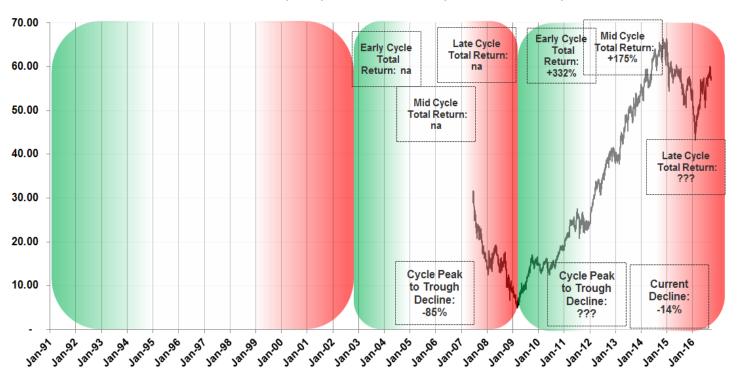
(2Q16 TTM, Millions)



Source: DES

CYCLE PERFORMANCE - DISCOVER FINANCIAL (DFS)

DISCOVER (DFS) STOCK PRICE (1991-PRESENT)



DATA SOURCE:FACTSET ©2016 HEDGEYE RISK MANAGEMENT

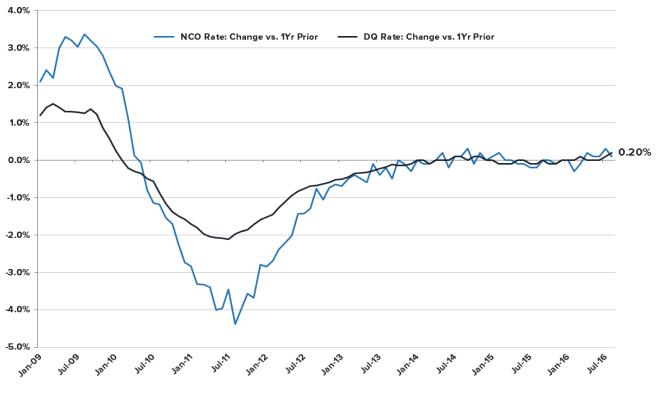
Discover offers the shortest history of the three, but is an interesting case study nevertheless in that it exhibited quite similar share price performance to COF and AXP in the last cycle (down -85% from its IPO in mid-2007 to its trough in early 2009), and saw gains of comparable magnitude in the early and midcycle portions of the current expansion. The stock has declined by -14% vs its late-2014 peak.

DISCOVER IS SEEING CREDIT DETERIORATE AS WELL

		Change
(%)	2Q16	QOQ YOY
Credit Card Loans		
Gross Principal Charge-off Rate	3.21%	6 bps 7 bps
Net Principal Charge-off Rate	2.39%	5 bps 11 bps
30-Day Delinquency Rate	1.63%	-5 bps 8 bps
Reserve Rate	2.80%	-6 bps 18 bps
Private Student Loans		
Net Principal Charge-off Rate (excl. PCI Loans) ⁽¹⁾	1.10%	25 bps 8 bps
30-Day Delinquency Rate (excl. PCI Loans) ⁽¹⁾	1.88%	-4 bps 10 bps
Reserve Rate (excl. PCI Loans) ⁽¹⁾	1.95%	9 bps -28 bps
Personal Loans		
Net Principal Charge-off Rate	2.38%	-7 bps 28 bps
30-Day Delinquency Rate	1.02%	5 bps 31 bps
Reserve Rate	3.07%	8 bps 53 bps
Total Loans		
Gross Principal Charge-off Rate (excl. PCI Loans)(¹⁾ 2.99%	7 bps 8 bps
Net Principal Charge-off Rate (excl. PCI Loans) ⁽¹⁾	2.27%	6 bps 11 bps
30-Day Delinquency Rate (excl. PCI Loans) ⁽¹⁾	1.60%	-4 bps 11 bps
Reserve Rate (excl. PCI Loans) ⁽¹⁾	2.77%	-3 bps 17 bps

Admittedly, Discover's deterioration is far more nominal than what we've seen from Capital One.

Discover: Credit Card Net Charge-offs & Delinquencies Vs. Levels One Year Prior

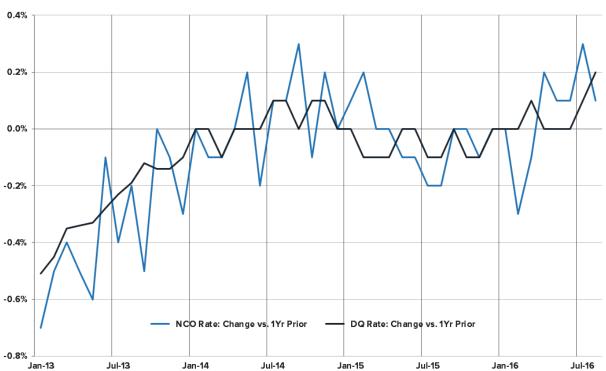


At just +20 bps Y/Y, it doesn't look like much, but Discover's August data showed the largest increase in the US Card Delinquency rate since the Great Recession.

We think it bears watching.

Source: SEC Filings © 2016 Hedgeye Risk Management

Discover: Credit Card Net Charge-offs & Delinquencies Vs. Levels One Year Prior



A closer look.

Source: SEC Filings © 2016 Hedgeye Risk Management

Discover Financial S	ervices	Q1 2011 (Q2 2011 C	Q3 2011 (Q4 2011	Q1 2012	Q2 2012	Q3 2012	Q4 2012 (Q1 2013 (Q2 2013 (Q3 2013 (Q4 2013 (Q1 2014	Q2 2014 (Q3 2014 (Q4 2014 (Q1 2015	Q2 2015 (Q3 2015	Q4 2015	Q1 2016 (Q2 2016
Credit Card Loans	660 and Above	76%	78%	79%	81%	81%	82%	83%	82%	82%	83%	82%	83%	82%	83%	83%	83%	83%	83%	83%	83%	82%	83%
	Less than 660 or No Score	24%	22%	21%	19%	19%	18%	17%	18%	18%	17%	18%	17%	18%	17%	17%	17%	17%	17%	17%	17%	18%	17%
	Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Discover Business Card	660 and Above	84%	86%	87%	89%	90%	90%	91%	91%	91%	92%	92%	92%	92%	93%	92%	0%	0%	0%	0%	0%	0%	0%
	Less than 660 or No Score	16%	14%	13%	11%	10%	10%	9%	9%	9%	8%	8%	8%	8%	7%	8%	0%	0%	0%	0%	0%	0%	0%
	Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	0%	0%	0%	0%	0%	0%	0%
Personal Loans	660 and Above	89%	94%	95%	97%	97%	97%	97%	97%	97%	97%	97%	97%	97%	97%	97%	96%	96%	97%	96%	96%	96%	96%
	Less than 660 or No Score	11%	6%	5%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	4%	4%	3%	4%	4%	4%	4%
	Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Private Student	660 and Above	93%	94%	95%	95%	94%	95%	95%	95%	95%	95%	95%	95%	95%	96%	95%	96%	96%	96%	96%	96%	96%	96%
Loans (Excluding	Less than 660 or No Score	7%	6%	5%	5%	6%	5%	5%	5%	5%	5%	5%	5%	5%	4%	5%	4%	4%	4%	4%	4%	4%	4%
PCI)	Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

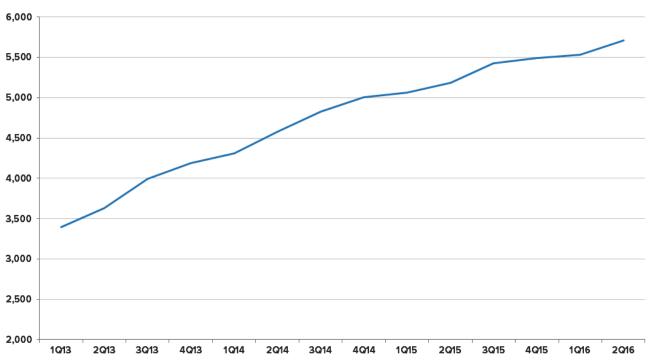
Source: Company Documents

Discover Financial Se	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	
Credit Card Loans	660 and Above	81%	82%	83%	83%	83%
	Less than 660 or No Score	19%	18%	17%	17%	17%
	Total	100%	100%	100%	100%	100%
Discover Business Card	660 and Above	89%	91%	92%	0%	0%
	Less than 660 or No Score	11%	9%	8%	0%	0%
	Total	100%	100%	100%	0%	0%
Personal Loans	660 and Above	97%	97%	97%	96%	96%
	Less than 660 or No Score	3%	3%	3%	4%	4%
	Total	100%	100%	100%	100%	100%
Private Student	660 and Above	95%	95%	95%	96%	96%
Loans (Excluding	Less than 660 or No Score	5%	5%	5%	4%	4%
PCI)	Total	100%	100%	100%	100%	100%

Source: Company Documents

DISCOVER HAS NOT FOLLOWED COF DOWN THE SUBPRIME RABBIT HOLE



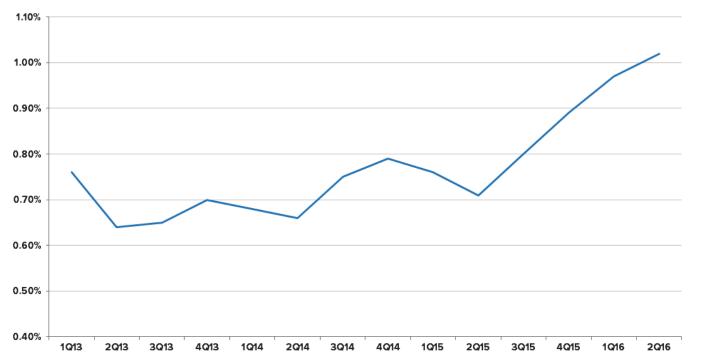


Source: SEC Filings

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One notable segment at Discover is the Personal Loans category.

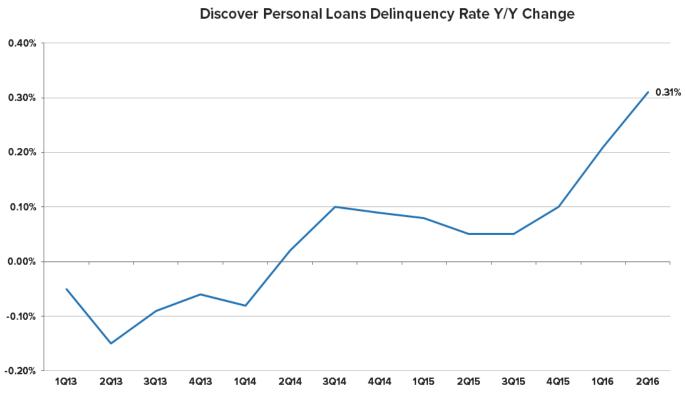




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Personal Loan credit quality is showing signs of deterioration.

Source: SEC Filings



On a YoY basis, Discover's Personal Loan book looks a lot like Cap One's card book. Is this where the bad credits are buried?

We'll be doing more work on Discover and each of these names in the coming months.

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INSIDER BEHAVIOR – DISCOVER FINANCIAL (DFS)



Discover had several insider buys in the 2008/early 2009 timeframe, but none since then. Meanwhile, open market insider selling has stepped up sharply in the last ~2yrs.

INTEREST RATE SENSITIVITY: DFS

+100 BPS INCREASE IN RATES



+3%, +\$230 million affect on NTM net interest income

Discover would see a benefit from rising rates.



Source: DFS 2Q16 10-Q

FOR MORE INFORMATION, CONTACT US AT:

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