Cashless Society & Credit Cards

$V	Visa
$MA	BULLISH +50%
	$70 → $110

The war on physical cash started by governments and central banks will eliminate the main competitor to credit cards: paper money. Visa and MasterCard will become natural monopolies. Their margins will go parabolic in the next 3-5 years.

March 12, 2016

Executive Summary

The use of physical cash has been declining in Western societies for years. The bulk of the payments market has been gobbled up by credit card companies, as consumers change their behavior for the sake of convenience and security.

The decline of paper money started for the sake of convenience, because consumers see credit cards as more practical. Now, institutions are pushing for a full shift to a cashless society as well. Central banks in particular, need to get rid of physical cash, for monetary policy to be effectively transmitted to the economy in an environment of negative interest rates.

The effect of this "war on cash" on credit card companies is underestimated. The increase in market share will indeed be marginal, as consumers in Western societies already make the bulk of their payments with credit cards. But the move to a cashless society will give credit card companies a monopolistic position, and full discretion on margins.

We are in the final stages of transition to a cashless society. The last obstacle is in handling small consumer payments, where the banknotes and coins are more practical. The solution is contactless payments. Smartphone manufacturers and credit card companies are battling for this last piece, and the latter have the upper hand.

Analysis

The use of physical cash has been declining in Western societies for years, for the benefit of credit cards

In September 2013, MasterCard unveiled a report titled « The Cashless Journey », tracking payment means in 33 major economies. The study focused on the value of all consumer payments ($63 trillion in total spend), including those that happen beyond retail point-of-sale. In 2011, 34 percent ($21 trillion) of total global consumer spend was done with cash, with cashless payments accounting for 66 percent ($42 trillion).

Belgium (93%), France (92%) and Canada (90%) lead the pack in the volume of cashless consumer transactions, while the United States (80%) was approaching the « tipping point » of becoming almost cashless.

In developed countries, cash has transitioned from the standard payment form, to an alternative to electronic payment solutions. This transition has happened gradually, by a societal behavior shift towards convenience and safety. PayPal,Visa and MasterCard have benefited immensely from this shift (Visa is up fivefold since its IPO in March 2008, MasterCard is close to a 20x-gain since its IPO in April 2006).

We have been living in an awkward environment where cash and credit cards coexist, in a sort of symbiosis. The availability of ATMs gives an excellent picture of of the transition from cash to credit cards. At first, as credit cards spread, more and more ATMs become available, as card holders still need to access cash for certain payments. But, past a certain point, the use of ATMs declines, as ever more businesses accept credit card payments, and the need to have paper cash on hand declines.

By this measure, credit card adoption worldwide is still in its first phase, Europe is past the point of no return, where cash becomes increasingly superfluous **(Chart 1)**.

Chart 1: ATMs per 100,000 adults, source: World Bank

Capture d'écran 2016-04-21 à 15.53.39

Governments and central banks have declared a war on cash, and are pushing for a full switch to a cashless society

Europe will be the model for a new model of cashless society. United States, Canada and Japan have seen their ATM availability plateau for a few years now. Emerging markets are still in a phase where cash is indispensable, although credit card usage is increasing, dragging ATM availability up in the world as a whole.

The "cashless society" paradigm has been complemented by another, new trend: the restriction of cash use is becoming institutionalized. A move towards electronic payment means has blossomed because it's just more convenient. However, as credit cards become ubiquitous, governments and large corporations are pushing for a complete switch. This is a "war on cash", plain and simple **(Chart 2)**.

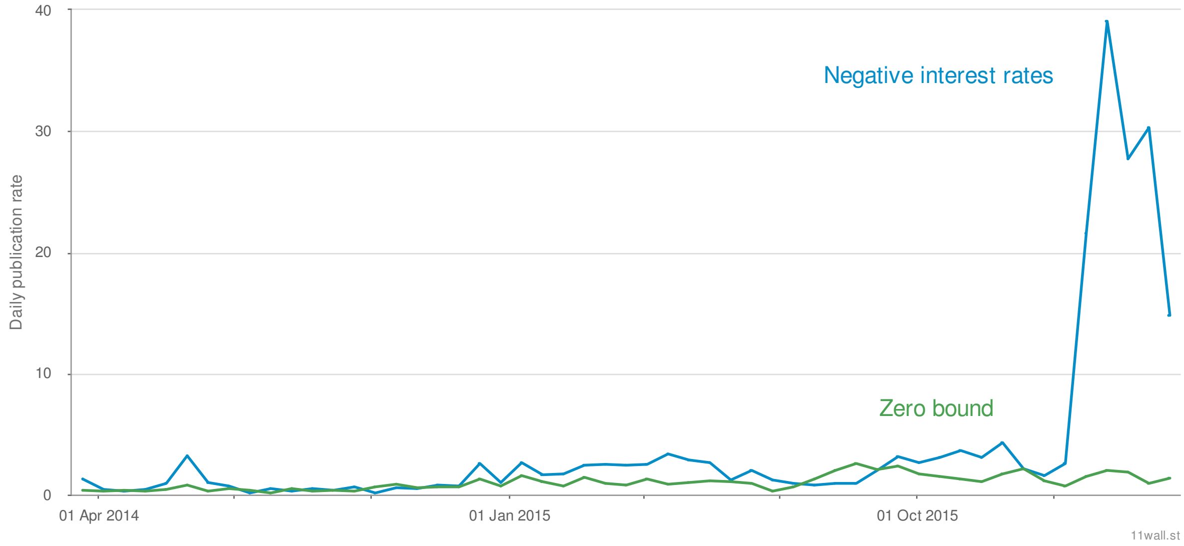
Chart 2: News flow for « cashless society » and « war on cash »

Governments have stepped up their efforts and PR campaigns to hunt cash down to the point of extinction. They have good reasons for that. It is estimated that bill and coin handling costs a country around 1,5% of its GDP, or $200 billion per year for the US alone. Think about ATM fees, cash handling, issuance of new notes and destruction of old ones, money counterfeiting, etc.

Another case for abandoning cash is the ability for central banks to set negative interest rates. Currently, the paper alternative dampens the monetary policy transmission mechanism, and setting deeply negative interest rates would be counterproductive. However, after a decade of flirting with zero-bound interest rates, that's the direction where the world is heading **(Chart 3)**. There's just too much overcapacity and debt, that can only be rolled over if real interest rates remain negative.

The necessity to set negative interest rates is a strong impediment for governments and central banks to restrict cash use as much as possible. And these efforts play out to the benefit of electronic payment solutions providers.

Chart 3: News flow for « negative interest rates » and « zero bound »



The sudden spike in media coverage of negative interest rates, and subsequent awareness of the new paradigm, was due to Bank of Japan's surprise move to negative interest rate policy (NIRP). It was completely unexpected (a week earlier, NOJ's Kuroda stated they had no plans to adopt negative rates in the near future). Furthermore, it came a mere month after the Fed had raised its own target rate, after 7+ years of Z(ero)IRP.

The end of cash will give a monopolistic position to credit card companies, and full discretion on margins

Currently, the new "war on cash" has not been linked to the effect it will have on credit card companies. The names of Visa and MasterCard are virtually absent from the debate **(Chart 4)**.

Chart 4: News flow for Visa and MasterCard in the « war on cash » context

Abolishing cash would mean abolishing the strongest competitor of electronic payment companies, in particular credit card companies (cash isn't really an alternative to PayPal). Payment market share gains would be minimal, as seen above. However, credit card companies would acquire absolute pricing power on consumer transactions.

Bank of America, JPMorgan and Wells Fargo earn around $15 billion in ATM fees per year, in the US alone (http://www.magnifymoney.com/blog/eliminating-fees/your-neighborhood-branch-is-making-1-million-a-year-in-hidden-fees). That's one trivial consumer expense that could be gobbled up by cashless payment operators without consumers being impacted, should cash disappear.

In 2015, Visa processed $7.4 trillion in payments, for revenues of $13.9 billion. Their margin on processed payments has been rising steadily **(Chart 5)**. As credit card companies become natural monopolies for consumer payment processing, their margins will rise ever faster, and contribute to earnings growth much more than the increase in the volume of processed payments.

Chart 5: Visa's operating income as a share of payments processed, in basis points (source: SEC 10-K filings from 2008 to 2015)

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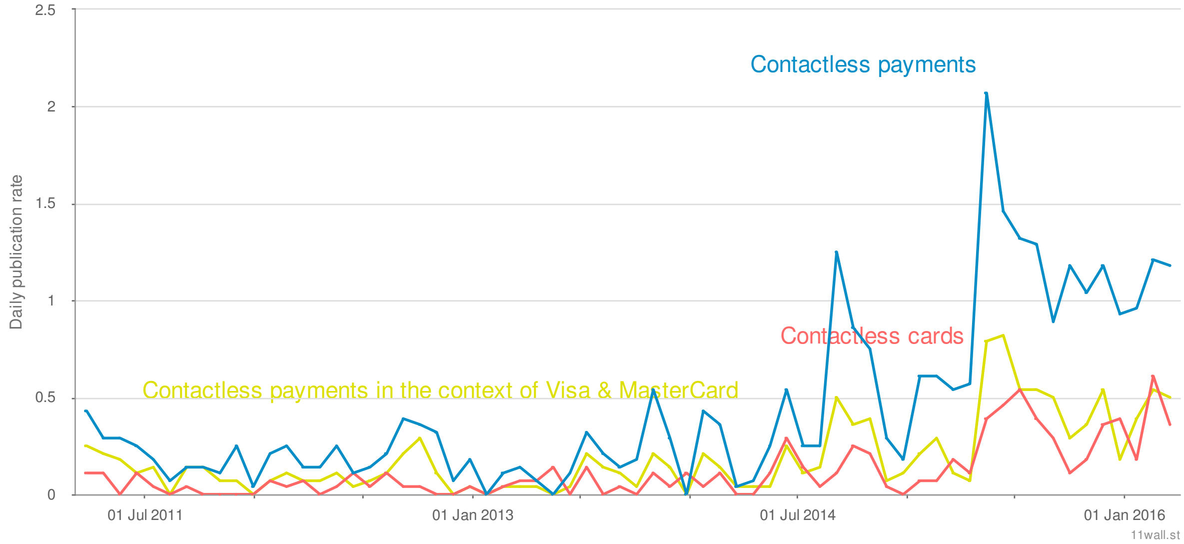
Credit card companies are winning the battle for small cashless payments, the last market segment still ruled by physical cash

A complete switch to electronic payments for consumer transactions needs a technological solution. Credit cards are not practical for small purchases. People just don't want to be bothered with security PINs and signatures for a $2 payment. The industry's answer to this reluctance is contactless payments, where a consumer just has to wave the payment token next to a receptor, without further authorization and validation **(Chart 6)**.

Chart 6: News flow for « contactless payments », Visa & MasterCard, and « contactless cards »



Smartphone manufacturers are actively trying to grab that share of the payments market. After all, almost everyone has a smartphone, and children own a smartphone years before they have a bank account or a credit card.

Their success has been mixed so far, to say the least. Softcard, the leading mobile wallet system, shut down in March 2015 after Google announced a deal with three of the four major US carriers which will result in Google Wallet being preloaded onto future Android smartphones. Before that, Softcard's system was riddled with incompatibilities and a complicated set-up process. At the same time, Apple is entering the market with its own solution.

Smartphones have one major disadvantage in the battle for contactless payments: people are just not used to pay with their mobile phones. The first-to-market advantage is just too big for credit card companies. Moreover, the smartphone wallet is more of yet another payment solution that people would be supposed to use on top of their credit card. It's just not practical, when the whole point of having contactless payments is convenience.

Google Wallet is discontinuing its own physical debit card on June 30, 2016, after it failed to stick for this very reason: it was just another payment system on top of your traditional credit card.

Roadmap & Playbook

As governments step up their efforts to restrict the use of cash, credit card companies will attain a monopoly on all consumer payments. Moreover, credit card use is still in its first growth stage for most of the world (ex Europe), as seen from ATM availability dynamics, which will continue to contribute to bottom line growth.

We expect Visa's and MasterCard's earnings growth to accelerate over the next five years as their margins increase. Both stocks are already priced in for growth, with P/E ratios just south of 30. The new driver for growth, however, should surprise to the upside, and as the market starts pricing in their newly found monopolistic posture, we expect both stocks to double over the next 3 to 4 years.

Probability	Event	Early signs
40%	Major economies adopt a cashless society model over the next 5-7 years. Credit card companies become natural monopolies on all consumer transactions.	• Bad economic data, deflation. • Banks increase fees on cash deposit / withdrawal. • Governments lower limits on cash transactions. • Media associates cash with criminals, terrorism. • Banks limit cash withdrawals. • Government-led efforts to provide e-payment solutions to the homeless.
20%	Major economies adopt a cashless society model, but credit card companies fail to benefit.	• Bad economic data, deflation. • Emergence of new payment methods, directly linked to bank accounts (not credit cards).
30%	Physical cash use declines, but cash itself is not eradicated.	• Inflation comes back. • Reports of failed cashless society experiments. • Growing awareness for the marginalization of lowincome households with bad credit scores, the homeless.
10%	Physical cash remains in use.	• Inflation comes back, big time.

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