The cash conundrum: how companies manage their most liquid asset

When lockdowns and travel restrictions started to threaten companies' survival in March last year, all eyes turned to cash. What was before a mundane Treasury responsibility became a hot topic for discussion amongst C-suite executives. Mentions of cash, liquidity, and lines of credit multiplied in earnings calls.

Cash management refers to "the collection, handling, control and investment of the organizational cash and cash equivalents, to ensure optimum utilization of the firm's liquid resources". It has four main objectives: fulfilling a company's working capital requirement, handling unexpected costs, planning Capital Expenditure, and preventing insolvency.

Treasurers juggle multiple responsibilities. First, they need to manage money flows in and out. Money flows when salaries must be paid, when suppliers must be paid and when customers must pay, for example. Not having enough cash on hand can be costly since the company may be forced to borrow at a non-attractive interest rate. On the flipside, treasurers must also identify surplus cash and invest it. Typically, they invest in money market securities such as T-bills, repos, reverse repos, Certificates of Deposits and Commercial Papers.

Although it sounds safe, cash management involves risk. Liquidity risk comes from the possible inability to convert an investment into cash before maturity without suffering an unacceptable loss of principal. Credit risk comes from the possibility that the counterparty does not meet the repayment of the principal or interest in full and on time. Market risk exposes the company to adverse changes in market rates (such as interest rates or foreign exchange rates), which result in a change in the price of assets held (including off-balance-sheet assets).

This article will explore the key issues that CFOs and treasurers face. Such issues can be summarized into four categories–-forecasting, internal and external transactions, money markets and more recently, cryptocurrency markets.

Issues with Forecasting

Enterprises need to have enough money on hand to meet all of their obligations. If a company does not have the cash to make its payments, it might have to sell its assets at a discount or face bankruptcy. Treasurers need to predict the cash they need to operate the company and identify extra reserves which can be invested into short-term assets.

Predictions usually happen every month for the next twelve months. The level of cash should also account for unpredicted events such as the cancellation of a sale or the breakage of an important asset. Treasurers usually rely on past operational data and software applications to make predictions. They use variance analysis to study how actual behaviour deviated from past forecasts. The best forecasting techniques, however, will continuously compare current forecasts against past realized events, and dynamically recalibrate themselves.

Internal and External Transactions

Corporations face transaction costs every time they exchange money with a counterparty. This counterparty can be a subsidiary, its division, a client, or a supplier. One popular method to decrease the total cost is to reduce the overall number of transactions. Companies can do this by summing up different transactions into one or by the process of "netting". Netting means that two companies cancel out claims they have towards each other. In this case, you can settle two claims with only one transaction. For example, company A owes company B $50, and company B owes company A $40. They will settle these two claims with only one transaction of $10 from A to B. Netting results in the biggest benefits for international transactions where exchange costs are sizable.

Companies that operate internationally also face other issues with internal transactions. The main issues are tax implications and risk hedging. Tax levels can be reduced by declaring profits in countries with lower corporate tax. Companies do so by billing their subsidiaries in high tax regimes for services delivered by companies in lower tax regimes. Regulations around the topic of tax avoidance are constantly changing and it might expose the company to legal risks. Furthermore, by operating in a foreign country, companies are forced to accept payments in different currencies. This exposes them to exchange risk, which can be hedged against by using derivatives.

The aforementioned tax avoidance creates another issue for multinationals. It might be hard to repatriate the earnings. "Repatriation" is the process of bringing money earned from your international subsidiary back into the home country. Often this would entail paying additional taxes as soon as you bring back the capital. This led to many American Companies storing their cash abroad. In 2017, The Trump administration passed the Tax Cuts and Jobs Act, which led to a dramatic decrease in repatriation costs. Many American companies used the new regulation to bring home their money. Apple for example, who at the time was the company with the biggest cash reserves abroad decided to repatriate $252.3bn in response to the new law.

Money Markets

Companies have many tools available to invest their excess cash. Most companies store or lend money for their operations in the money markets. But why do companies not hold their cash in bank accounts? Indeed, most small companies keep their cash in their bank. Bigger companies will not have this option because of the sheer amount of money they need to store. Depending on the country, each deposit is only insured up to a maximum amount of a couple of hundred thousand dollars. Thus, if a company needed to store $100m in a regular deposit account, it would expose itself to large counterparty risk. Collateralized short-term securities are the preferred option in such a case.

While money market instruments usually decrease the counterparty risk, they increase the market risk. Two recent market failures are worth mentioning. Firstly, in September 2019 the interest rates for repurchase agreements in the US increased dramatically overnight to over 10%. This happened because all the companies had to pay their taxes at the same time, and they withdrew from the money markets pushing down prices. The Federal Reserve had to step in to calm the markets. Secondly, at the beginning of the Covid-19 pandemic short-term government bonds, which are considered the safest and most liquid asset class, were quite illiquid and were selling at a steep discount. CFOs should be aware of the risks that the securities they invest in contain.

Recently, low-interest rates reduced the explicit interest cost and the opportunity cost of holding cash or cash securities. Even the Oracle of Omaha has been holding a sizable pile of cash of $145.7bn. More notably, big tech companies are also deciding to hold cash rather than reinvesting or returning it to investors. For example, Apple and Microsoft were holding $191.8bn and $138.0bn according to their Q3 disclosures in 2020. These companies must park their money somewhere and they drive the demand for money markets instruments such as commercial papers, repurchase agreements, short-term government bonds, and certificates of deposits. Nevertheless, the low-interest rates led treasurers and CFOs to explore new liquid assets to satisfy this demand.

Bitcoin as an alternative to cash

MicroStrategy, Square and most notably, Tesla, have all invested in Bitcoin as an alternative to holding cash.

Cryptocurrencies differ from regular currencies in many ways, starting with accounting. On the company's books, cryptocurrencies are fixed assets while cash is a current asset. A note by J.P. Morgan from two week ago comments on Bitcoin's liquidity, stating that "market liquidity is currently much lower for bitcoin than in gold or the S&P 500, which implies that even small flows can have a large price impact." Bitcoin is also more volatile than cash. The latest 60-day estimate for daily price volatility in Bitcoin is 5.36% while that of gold averages around 1.2% and of other major currencies averages between 0.5% and 1.0%. Hackers, fraud, and forgotten passwords further threaten the cryptocurrency, even though custodial services can mitigate this risk. Yet, Bitcoin's 301% return in 2020 did not go unnoticed and despite all the risks, several companies including MicroStrategy, Tesla, and Square hopped on the crypto wagon.

MicroStrategy is a business intelligence software company that has made the biggest Bitcoin bet yet: $2.2bn spent on the cryptocurrency. The company made its first bitcoin purchase in August 2020, using existing cash on its balance sheet. It has since completed two convertible debt offerings to raise capital to finance additional purchases of bitcoin. This turned MicroStrategy, a once stable and predictable software company, into a leveraged bitcoin play. Today, the company holds 90,531 coins. The company's stock traded around $120 in early August before its initial Bitcoin investment and has since soared to levels not seen since the dot-com boom, reaching a peak of $1,315 per share on February 9th. In mid-July, MicroStrategy held over $500m in excess cash and faced a dilemma. It could pay out the cash in dividends, use it to acquire another company or invest it into a liquid asset such as a treasury asset, which would not appreciate in price faster than the central bank printed money. Paying the money back to shareholders would decapitalise the company and so in case of a negative event would put the company at risk of solvency. Michael Saylor, CEO of MicroStrategy said that ultimately the expansionary monetary environment and the greater long-term appreciation potential of Bitcoin over cash convinced him to enter the crypto space. Saylor views Bitcoin as "an institutional grade treasury reserve asset" and has cited the cryptocurrency's liquidity and 24/7 decentralised financial transfer market as the primary reasons for its potential of becoming the dominant reserve currency, taking on the same role gold has in previous eras.

Tesla recently purchased $1.5bn of bitcoin in a move that undoubtedly represents the cryptocurrency's most significant corporate endorsement yet. The investment represented 11% of the company's cash. Tesla said the move was an effort to "further diversify and maximise" the return on its cash. CEO Elon Musk tweeted "When fiat currency has negative real interest, only a fool wouldn't look elsewhere." The company also plans to accept Bitcoin as payment for its products. However, many observers have said the bet on bitcoin appears more of a personal bet or a publicity stunt by its nonconformist CEO. Bitcoin is associated with a group of freethinking founders who wanted to revolutionise payments – these rebel ideas align with Musk's own image and that of his company. However, Tesla's Bitcoin investment contradicts its environmental mission. Mining Bitcoin requires electricity on a vast scale – around 78 terawatt hours a year globally, equivalent to the consumption of Chile, a country of 20m inhabitants. Tesla's position in green investors' portfolios and its current "A" ESG rating from the index compiler MSCI may be put into question.

Finally, Square announced a $170m investment into Bitcoin on February 23rd, building on its previous $50m investment at the end of 2020 and in total representing 5% of Square's total cash. Square makes hardware, software, and mobile apps that facilitate payments. The company helps businesses accept credit card payments, can extend them small loans, and operates "Cash App", a peer-to-peer payment and investment platform that competes with Venmo. Importantly, Cash App allows its users to trade Bitcoin. As such, Square has a clearer operational rationale for owning Bitcoin, compared to MicroStrategy, which sells software and Tesla, which sells cars. Similarly to the latter two, Square has cited the "unprecedented uncertainty from a macroeconomic and currency regime perspective" and the company's "largely USD-denominated balance sheet" as motivations for the Bitcoin move. The company also believes that "cryptocurrency is an instrument of economic empowerment". CEO Jack Dorsey is a long-time proponent of crypto currencies and believes Bitcoin will eventually become the world's single currency.

TAGS: Cash, cash management, crypto, bitcoin, cryptocurrency, cryptocurrencies, Square, Tesla, MicroStrategy, money market, liquidity, line of credit, solvency, netting, tax, subsidiaries