



THE DOLLAR DIALECTIC

Are foreign-exchange (forex) traders the most far-sighted players in the capital market? Can the almost \$5 trillion traded in and out of the dollar on a daily basis be wrong?

Just two months after Donald Trump's election the greenback began to weaken – ending a rally since mid-2011. Did the forex market immediately anticipate that Trump's unorthodox political style would harm the global currency? Did the forex market fear – from the outset – economic overheating, a ballooning twin deficit, the termination of international trade agreements, harsh treatment of allies, friendship with foes, and the loss of the dollar's appeal as the dominant settlement and reserve currency?

This, of course, is just one way of looking at the decline in the dollar since Trump became U.S. President. We could easily find a fistful of other reasons, compelling causalities and impressive correlations to explain the dollar weakness that began at the beginning of 2017. When it comes to foreign exchange, it's not difficult – after the fact – to dip into the large pool of short, medium, or long-term factors in order to justify past currency moves. You can take your pick for the most recent dollar push from 1.25 to 1.15 against the euro. Renewed long-term Eurozone concerns prompted by Italy; medium-term, recently accelerating U.S. growth and European slowdown; short-term, investor positioning and positive signals from technical analysis?

The reality is that you seldom get far in the forex market by relying on only one explanatory model. Currencies are impacted by a host of factors whose impact waxes and wanes over time. The challenge for us as forex strategists is to assess which will become the key driver for a currency, and when. It is possible to recognize long-term developments early on but still be on the wrong side of the market for long periods. For that reason we work with models based essentially on three pillars: macroeconomic fundamentals; sentiment and positioning; and market technicals.



"The dollar has already reached our target. Currently, the arguments are balanced."

IN A NUTSHELL

- At 1.15, EUR/USD has reached our target level as of November 2017 sooner than we expected.
- The major imbalances have, in our view, been eliminated. For the time being we see EUR/USD trading sideways.
- You can't depend on one model: we analyze why the special characteristics of the foreign-exchange market make the constant re-weighting of key variables essential.

THE DOLLAR AND US

This is not a rigid, purely quantitative model but a dynamic framework that we regularly synchronize with our qualitative assessment. Our Chief Currency Strategist, Stefanie Holtze-Jen, sums up her work in this way: "The end game in currency trading is to have a good feeling for the interplay of the various drivers, especially when long-term factors come to the fore again and dominate short-term factors. Alongside the fundamental macroeconomic developments, we always keep an eye on investor positions and also the signals provided by the charts."

While from a strategic standpoint we had been expecting a stronger dollar for some time, in tactical terms it was only in mid-April that we implemented the position in many of our portfolios. At that point it appeared to us that the positioning of speculative futures traders was euro-euphoric to the point of being extreme, and at the same time EUR/USD had broken out of a multi-week sideways channel, which provided us with an important technical signal.

Thanks to an impressive rally, the dollar subsequently hit our target of 1.15 sooner than we had anticipated. At our quarterly strategy conference we then reviewed our tactical and strategic dollar outlook once again and concluded that in the short term extreme market positions have been unwound and the exchange-rate chart is not providing any clear signals. At the

same time, we see some structural factors that could be a drag on the dollar in the long term and the euro in the medium term. Overall, we believe these various forces are currently balanced, with the result that we expect EUR/USD to trade sideways over the next twelve months.

As with every currency call, this is based on the current situation and our latest macroeconomic forecasts. It is, however, highly probable that by mid-2019 there will have been enough new surprise events to give us reason to call for a clear directional move in this currency pair.

CURRENCY – THE DIVA OF THE CAPITAL MARKETS

"Buy something good, hold on to it, and get rich." This maxim may be applicable to equities but simply does not work for currencies. With currencies, relative performance, mean reversion and hedging costs all count. Frequent trading and switching may often be necessary and that, in turn, requires a clear view. The challenge is big. Opinions differ widely, and not just on the future, but even on past currency movements.

What has been driving the dollar this year? The record-high transatlantic spread¹ or the highly-charged invective the U.S. President has been spewing? And what will now drive the greenback going forward? These questions are difficult.

A player in the capital markets should, however, have an opinion on what drives the dollar, if for no other reason than the greenback's value having a major impact on many other macroeconomic and capital-market forecasts. At the same time, the dollar call is in part the outcome of these other forecasts. On top of this, the performance of the dollar and all currencies depends on that of other currencies. Nor can we escape this relative view by looking not at a single exchange rate but at the performance versus a currency basket. Who is to say that one currency is strong and not that other currencies are weak?

Forex forecasts are also made more difficult by the fact that every longer uptrend or downtrend of a currency can already lay the foundation for the countertrend. One example here is the issue of competitiveness and exports: strong currency appreciation can undermine the ability to export, which could also hurt the domestic economy and, in turn, put pressure on the currency.

A further special characteristic of the forex market is that there is probably no other financial market where such a large percentage of players trade without the aim of generating a profit. In a Deutsche Bank study², George Saravelos estimated that players such as central banks, tourists, companies and others that do not intend themselves to make a profit on

¹ The 2-year spread between U.S. Treasuries and German Bunds is 2.35%, a 3-year high, and the 10-year spread is 3.04%, a 29-year high. Data as of 4/24/18

² "Alive and Kicking: A Guide to FX as an Asset Class", Deutsche Bank AG/London, 02/05/2018

the purchase and sale of currencies account for almost 50% of forex trading. While that might create doubts about the market's efficiency in the academic sense, it can also mean higher profit opportunities for speculative investors.

Even this does not solve the main problem of currency forecasts: the multitude of possible and actual input factors. Are there 10, 100 or 498 factors that drive an exchange rate? Is it merely a question of time before big data and artificial intelligence can prove that even the infamous sack of rice that tips over in China influences the Renminbi exchange rate? We doubt it. Instead we continue to assume that the Pareto principle applies to foreign exchange: at any one time a small number of factors explain a large part of the movement. However, the degree of influence of the individual factors constantly changes, as does the degree of interdependence between the individual factors. In short, the market's forces and their interplay must constantly be read. Rather than capitulating in the face of the market's complexity, we should not underestimate the power of human judgment to do that.

The dollar – green supremacy waning

The extent to which forex markets can be predicted at all is also a question of time horizons. In 1983 Meese and Rogoff pointed out that classical econometric models are pretty good at explaining long-term but not short-term currency shifts.³

In the recent past, however, short-term signals, such as positioning and sentiment, have had a high explanatory force, something we have factored in to our assessments. But where the long term is concerned one problem neither academics nor practitioners can circumvent is the painful lack of statistical data. Many time series go back only a few decades. That may sound like a lot but it is only enough to provide data for a few interest-rate, economic and deficit cycles.

The long view: is the dollar losing its dominance?

Even short-term investors have to bear in mind the dollar's longer-term characteristics – not least because they repeatedly explain short-term movements. The factors that support the dollar structurally include:

- The dominant role it plays in international trade. Over half of transnational trade is settled in the dollar, compared to one third in the euro.
- Approximately two-thirds of all central-bank forex reserves reported to the Bank for International Settlements (BIS) are denominated in dollars.
- Almost 90% of forex transactions involve the dollar.

For the U.S. government and U.S. corporates this home advantage is nirvana. Ben Bernanke, the former chairman of the U.S. Federal Reserve (the Fed), estimated, for example, that the U.S. government profits to the tune of \$20 billion annually from non-interest-bearing dollar reserves held abroad. And U.S. corporates

profit since they avoid currency-hedging strategies and related costs on the international stage. The currency is only a drawback for the U.S. economy in one regard: since the dollar is considered a safe haven, it appreciates at times of international economic crisis, thereby acting as a short-term drag on U.S. exports.

The extent to which the global reserve currency deserves the predicate "valuable" is another story altogether. But in the interim that applies to virtually all currencies generally described as "hard." The Swiss franc, however, certainly enjoys a pronounced degree of hardness.

For those who find the Swiss franc still too virtual, the chart also incorporates the performance of the dollar against gold. That gold in dollar terms has averaged an annual return of 8% over the last 47 years is perhaps the wrong formulation. For despite the fact that mankind has revered gold for millennia, the dead material does not generate a return. That the greenback has lost 97% of its value in the same timeframe is more accurate.

³ Richard A. Meese/ Kenneth Rogoff "Empirical Exchange Rate Models of the Seventies: Do they fit Out of Sample?", Journal of International Economics 14 (1983)

Even the man many blame for dollar weakness since the turn of the millennium would probably agree: Alan Greenspan, the chairmen of the Fed from 1987 to 2006 opined that "Gold is a currency. It is still, by all evidence, a premier currency, where no fiat currency, including the dollar, can match it."4 It is not only in this context that the legendary remark by former U.S. Treasury Secretary John Connally is as cynical as it is accurate: "The dollar is our currency and your problem." With this remark he surprised his European counterparts in November 1971 - three months after Richard Nixon turned the dollar into a fiat currency by abandoning the gold standard, and roughly two years before the Bretton Woods regime was terminated.

Thus far, however, the United States has fared pretty well with this strategy. After all, the United States has been importing more goods than it exports for decades and financing this by selling foreign countries sovereign bonds denominated in a currency that, over the long term, has lost value against a currency basket.

The dollar's special status means the currency can take some liberties before being punished. Where the funding costs of other countries would immediately spike, the United States continue to profit from its "safe-haven" status, even when it is the catalyst of crisis. At the same time, no central bank would dare pursue a monetary policy independent of the Federal Reserve.

THE DOLLAR RELATIVE TO THE SWISS FRANC AND GOLD

The soft curves of a so-called hard currency



Source: Thomson Reuters Datastream as of 6/19/18

POLITICAL RISK AND CUR-RENCY STRENGTH

The impact of politics on the strength of a currency is as hotly-debated a topic as politics itself. Cynics would claim that the quality of the leadership in the White House is irrelevant for the currency, since the persuasive power of the dollar and U.S. Treasuries is based primarily on the military strength of the United States. But that argument cannot of course explain medium-term fluctuations in the dollar's value.

Should the dollar fear Trump...

At the outset we questioned whether the dollar weakness that began just after the election of the new U.S. President was mere happenstance. Whether or not that is the case, there are now growing warnings – including in the United States – that Trump's erratic policy, which is blurring the line between allies and foes, could harm the dollar's dominance.

With his aversion to long-term, binding, multilateral economic-policy agreements and his preference for ad-hoc punitive measures and sanctions even on allied countries, Trump is not making it easy for global companies and banks to enthuse over the dollar as a currency for settlements. This is especially true since the United States has repeatedly demonstrated in recent years how it has used the dollar system to impose

⁴ From a speech delivered to the "Council on Foreign Relations", a U.S. think tank, in October 2014.

its foreign policy, even on third countries and their companies. Professors Henry Farrell and Abraham Newman⁵ of George Washington University recently cited two examples to demonstrate how Trump's incoherent economic policy could hurt the dollar. Trump showed himself to be very conciliatory when he overturned the treatment of a Chinese telecoms equipment supplier but threatened sanctions on European companies which - relying on the United States sticking to its Iran nuclear deal - had invested in Iran. According to Farell and Newman, this combination of unpredictability and draconian measures may in the longer term encourage targeted states and companies, and even U.S. allies, to "diversify" away from the U.S.-led global financial system.

Furthermore, Trump's "America first" policy, which also involves withdrawal from numerous international partnerships, has often resulted in the remaining partners then pursuing negotiations all the more vigorously without the United States.

In the short term, the United States is facing even more political turbulence given the imminence of the November midterm elections. Irrespective of whether they result in Trump losing the majority in one or both houses of Congress or emerging stronger from the election, the election campaign alone will probably heighten the risk of surprising policy announcements or tweets.

...or the euro, Italy, or even Berlin?

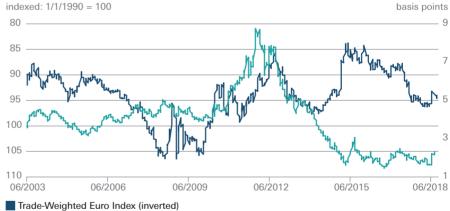
The difficulty of forming a government in Italy, and above all the prospect that a coalition of the Lega with the Five Star Movement could seek salvation in doubtfully-funded fiscal generosity means the possible birth defects of the single currency have moved to center stage again since May. There is no doubt that the widening of Italian spreads went hand in hand with euro weakness. On top of that, since mid-June there has been escalating government crisis in Berlin.

The Christian Social Union (CSU), which is demanding a stricter migration policy, is likely to hamper the

Christian Democrats' (CDU's) Europefriendly policy. All this is likely to confront the euro with a headwind in the short term. If, however, we look at the medium-term correlation between the euro and Eurozone political risk (measured by the GDP-weighted average yield premia of the periphery economies), no strong correlation with political risk can be established over the past 15 years. Even at the height of the euro crisis the euro was not as weak against the currency basket as in 2015 and 2016. Consequently, the path from political decisions to currency strength appears to be long, at least among the heavyweights of the industrialized nations.

YIELD PREMIUM OF THE EURO PERIPHERY

This crisis signal has little impact on the euro over the medium term



Spread Eurozone Periphery vs. Germany (right axis)*

*GDP-weighted risk spread of sovereign bonds of the periphery countries Italy, Spain, Portgual, Greece and Italy to German 10-year Bunds Source: Thomson Reuters Datastream as of 6/19/18

Washington Post vom 14. Mai 2018. https://www.washingtonpost.com/news/monkey-cage/wp/2018/05/14/trumps-u-turn-on-chinese-mega-firm-ztedamages-u-s-power-and-credibility/?noredirect=on&utm_term=.3b39a3c5fd57

Deficits do hurt the dollar

At the latest passage of debt-funded tax handouts by the Trump administration at the end of 2017, many attributed dollar weakness to the rising twin deficits of the United States since 2017. The Congressional Budget Office (CBO), for example, expects the deficit as a percentage of GDP to increase from 6.4% in 2017 to 8.4% in 2020. Is a weak dollar the logical consequence of this?

Not necessarily if we look at the chart. Even though a higher deficit has tended to go hand in hand with a weaker dollar since the mid-1990s – with the exception of the boom and crisis years of 2006-09 – the extent of the weakness and its timing has varied markedly.

The 1980s stand out because the fiscal ink was deep red for the first time since World War II. But for a lengthy period, this left the dollar untouched. For five years its external value even increased. Hope that President Ronald Reagan would introduce neo-liberal economic reforms is the probable explanation. And indeed GDP growth accelerated appreciably until the middle of the 1980s.

It is, however, questionable whether similar expectations should be attached to Trump's current fiscal and debt program. Ultimately, the Trump administration is stimulating an economy that is in good shape and in the late autumn of its cycle, with record-low unemployment. The twin deficit is unlikely to provide the dollar with a tailwind. It might become a headwind if it does not stimulate GDP growth after all.

Funding and Fed abstinence

Any discussion of the budget deficit leads to the topics of the funding requirement and Treasury issuance, which in turn can drive the currency. The market expectation is that the U.S. Treasury department will have to double its borrowing in 2018 compared to the previous year, to \$1.3 trillion. The last time the administration had to borrow as much was in 2010. This is happening precisely at a time when the Fed is scaling back its own holdings of Treasuries. Assuming flat demand for the time being,

greater supply is likely to provoke rising funding costs, i.e. higher yields for U.S. Treasuries. But to deduce that a stronger dollar will follow from this would be false. First, investing in Treasuries will not become more attractive, even with a higher coupon, if this is based on a higher inflation component – which in turn could pave the way for later dollar depreciation. Second, the additional Treasury purchases would ultimately serve to absorb the higher dollar supply created by the twin deficit.

THE U.S. TWIN DEFICIT CONTINUES TO GROW

So far, it has strengthened the dollar only once



*Four-month moving average; numbers from 2018 onwards are Congressional Budget Office forecasts Source: Thomson Reuters Datastream, Congressional Budget Office as of 6/19/18

The Eurozone, meanwhile, exporting goods and cash again

In the Eurozone, as the U.S. President has no doubt been told, the trends are moving in the opposite direction. While the current account was virtually balanced for almost ten years, since 2012 it has ventured far into positive territory and is rushing from one record to the next: in the first quarter of 2018, the current-account surplus was equivalent to 3.6% of GDP. This is unfortunate insofar as this key figure contributes to U.S. discontent. Even though, when looking at the chart, it is initially difficult to recognize a correlation between the euro and the current-account / twin deficit, it would presumably become less difficult if the impact of the financial crisis and later euro crisis were factored in.

Purchasing power parity: it works long-term

Interest-rate parity is to the financial investor what purchasing-power parity6 is to the tourist and importer or exporter of goods. It makes sense that in theory the purchasing power of a currency should be the same in another country for a specific basket of goods. But it makes equal sense that in practice there are some obstacles to this parity, such as different national preferences with regard to the basket of goods, trade barriers, etc.). But as a glance at the chart shows, the exchange rate calculated based on the purchasing-power parity can serve at least as a guideline for the spot rate over the medium to long term. At any rate, the spot rate cannot maintain too wide a gap from the purchasing-power-parity rate for long.

AT ONE POINT, THE EUROZONE ALSO HAD A TWIN DEFICIT

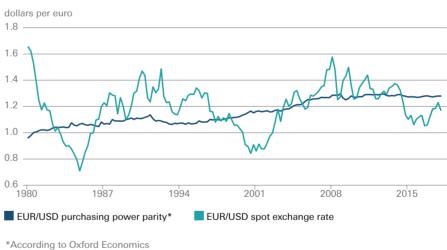
Now the current account surplus is pulling everything into positive territory



Source: Thomson Reuters Datastream, Bloomberg Finance L.P. as of 6/19/18

PURCHASING-POWER PARITY

In the long term, a reliable guideline for the spot rate



Source: Thomson Reuters Datastream, Bloomberg Finance L.P. as of 6/19/18

⁶ If both interest-rate parity and purchasing-power parity apply, this is referred to as the real-interest-rate parity.

Different growth forecasts and forecast changes

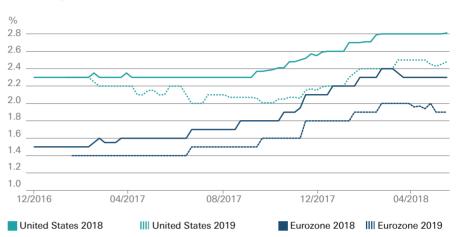
Let's return to the importance of GDP growth for forex rates. For the evolution of the exchange rate we attach greater importance to changes in the projected growth rates of two countries, and therefore the growth gap.

The chart on the right shows three things: for 2018 and 2019, economists expect higher growth in the United States than in the Eurozone; this gap has narrowed in the course of the past year, with Europe's economic performance surprising positively; as certainty grew that the Trump tax package would pass, U.S. growth forecasts were also raised.

Whether and to what extent the tax reform would have a positive impact on the dollar, via higher growth forecasts and the repatriation of profits held abroad, was much discussed. The market decided quickly: the dollar index eased. In our view, the repatriation volume is too small overall



The change is the key



Source: Bloomberg Finance L.P as of 6/19/18

to support the dollar over a lengthy period.

In light of the most recent U.S. and European leading economic indicators as well as the events in Italy, the growth gap has widened again, which has given the dollar a tailwind. At the end of June, we raised our growth forecast for the current year for the United States from 2.6% to 2.8% and lowered it for the Eurozone from 2.3% to 2.2%. For 2019, we expect GDP growth of 2.6% in the United States and 1.9% in the Eurozone.

⁷ Bloomberg consensus estimate

THE YIELD CURVE – STILL THE FORECAST MIRACLE?

Anyone who does not lend much credence to forecasts from paid capital-market observers can also look at the growth forecasts that emerge from actual asset flows. It is generally accepted that the yield curve is a good economic indicator. Every U.S. recession since World War II has been preceded by an inverted yield curve in which 10-year U.S. Treasuries yielded less than 2-year paper.

Since the beginning of 2014, the U.S. yield curve has been steadily approaching the zero threshold on the brink of inversion. The current low for the cycle of 35 basis points was reached only recently, on June 26. Since long-term rates rise more slowly than short-term rates, this constellation is referred to as a bear flattener. The bear in this context can be misleading since this environment is historically good for investments in equities. The economy is late in the cycle, and the central bank is beginning to counter overheating with rate hikes. The only better environment for equities is a bear steepener, when the yield curve steepens because of a strongly expanding economy and a resulting rise in rates at the long end. This is the constellation currently seen in the German sovereign-bond market. Consequently, Germany, as a proxy for the Eurozone, could be facing a more dynamic year than the United States.

The informative value of the yield curve may, however, have suffered because of ultra-easy central-bank

THE YIELD CURVES IN THE UNITED STATES AND GERMANY

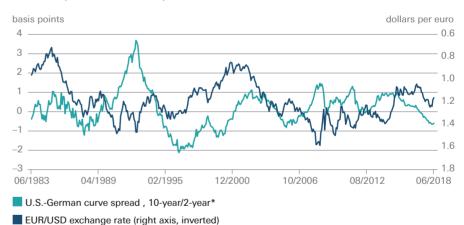
How well do they currently reflect the economic cycle?



Source: Thomson Reuters Datastream as of 6/19/18

YIELD-CURVE SPREAD UNITED STATES AND GERMANY VS. EUR/USD

Different yield-curve developments cannot be used as a driver



The second secon

*The 10-year/2-year spread curve describes the difference in yields between 10-year and 2-year government bonds. Source: Thomson Reuters Datastream as of 6/19/18

policy. German yields still appear to be driven above all by forces other than economic prospects. In any event, a glance at the chart below shows that there is no convincing correla-

tion between the EUR/USD exchange rate and the U.S./German yield-curve spread. Nor does this change much when we push the yield curve out 12 or 18 months.

Exchange rate and yield spreads

Let's take one calculation step back and look at EUR/USD relative to the spread between 2-year and 10-year U.S. Treasuries and German Bunds. Over the long term, this does tend to show a correlation, but the correlation coefficient is nevertheless only -0.56 for 10-year and -0.5 for 2-year paper. If we look solely at the period from 2008, the readings increase somewhat to -0.77 and -0.78, respectively.

But what if the yield spread is also attributable to inflation differences? Real (inflation-adjusted) yield spreads produce better results. The correlation⁸ of -0.44 for the USD/EUR compared to the nominal spread (10-year bonds) changes to -0.69 based on the real spread. That is not surprising, since over the medium to long term the strength of the currency should correlate with the (real) economic power of a country.

Finally we want to take a look at the shorter end (of the yield curve). Can differences in the nominal and real interest rates of the central banks explain currency shifts? Here too, the chart seems to suggest – at least over the long term – that central-bank decisions do not leave the currency markets completely unscathed. However, any correlation has disappeared since the European Central Bank (ECB) opened the floodgates in 2015.

The statements from the Fed and the ECB after their latest meetings in mid-June suggest with a high probability that the spread will widen even further. While the ECB surprisingly stated it would leave its benchmark

NOMINAL YIELD SPREAD UNITED STATES AND GERMANY

Drives the exchange rate from time to time



Source: Thomson Beuters Datastream as of 6/19/18

REAL YIELD SPREAD UNITED STATES AND GERMANY

Drives the exchange rate much more often



*10-year government bonds after deducting consumer-price inflation Source: Thomson Reuters Datastream as of 6/19/18

⁸ Because of the turmoil surrounding the end of Bretton Woods, measured only from the beginning of 1973

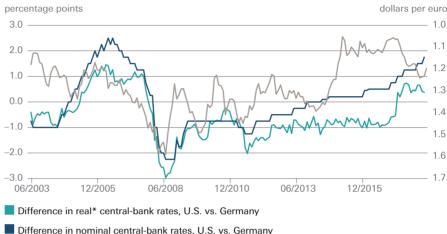
rates unchanged until beyond summer 2019, the Fed revealed that it expects two further rate hikes in 2018 and three in 2019. That means a more aggressive Fed and a more accommodating ECB. After the ECB decision, the euro lost over 2% against the dollar.

Anyone wishing to explain exchangerate movements with the varying yield potentials of two countries must, however, also consider which investor can profit from these yield spreads and in what way. Irrespective of whether the investment is made abroad via the real economy, the equity market or the bond market, the question is always whether the domestic investor would like to hedge his investments against currency fluctuations. The easiest way to calculate the cost of a hedge of this kind is via prices on the futures market - or, to be more exact, the forwards, whose pricing in turn follows the interest-rate parity closely.

The chart below shows the hedging costs for three different investment periods. Simply put: a German investor who puts his money in U.S. instead of German investments must either hedge, which costs him roughly three percentage points, or go into the transaction unhedged and hope that the currency does not depreciate to the extent suggested by the interest-rate parity. In any event, the high costs of hedging probably prevented many foreign investors from taking advantage of the tempting yields offered by the United States this year.

KEY RATE GAP BETWEEN THE FED AND THE ECB

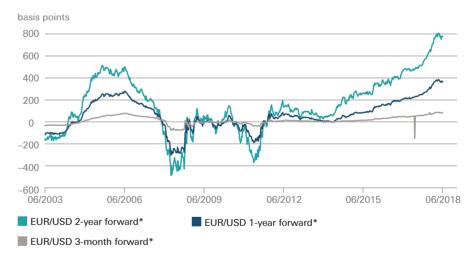
Whether real or nominal, recently they could scarcely explain EUR/USD



- Difference in nominal central-bank rates, U.S. vs. Germany
- EUR/USD exchange rate (right axis, inverted)

EUR/USD FORWARD PRICES FOR VARIOUS MATURITIES

Hedging erodes return



*Forward exchange rates are determined by using the arbitrage-free price relationship between the interest rates of the two currencies and the current spot rate. The rates are not being annualised Source: Thomson Reuters Datastream as of 6/19/18

^{*}United States: federal funds rate, Germany: ECB refinancing rate, both after deducting core consumer price inflation. Source: Thomson Reuters Datastream as of 6/19/18

FROM THE EXTERNAL TO THE INTERNAL DRIVERS

Thus far we have used charts in an attempt to illustrate which factors – if any – have an impact on currency movements. But that says very little about the usefulness of these factors to generate excess returns on the currency market. To do this, the mentioned variables would have to anticipate currency movements. They simply cannot do that. Sometimes the so-called leading indicator leads, sometimes it comes in parallel and sometimes it lags the dependable variable.

The pattern is, therefore, similar to that on the equity market. The purchasing managers' indices may be upstream from the real economy but on their release are quickly priced in – which ultimately is a characteristic of efficient capital markets.

Like purchasing managers for the real economy, speculative traders on the futures exchanges are the forex prophets. In a 2004 study, Thomas Klitgaard and Laura Weir from the New York Federal Reserve demonstrated that the futures market and the spot market run almost parallel and that consequently the futures market has no predictive power.⁹

But we think our chart below tells a different story. First, there is no denying that from 2008 there are some turning points where traders' positions ran ahead of the market. Sec-

ond, it is striking how – contrary to every text-book view – euro positions expanded just when the ECB's bond-purchase program began.

Positioning and chart signals as triggers

Futures-market positions in the Chicago Mercantile Exchange (CME, a major U.S.-based derivatives exchange) have had an important influence on our dollar decisions this year. Above all the – historically speaking – extremely optimistic euro forward purchases since the beginning of the year made us wary. After we became convinced that investors

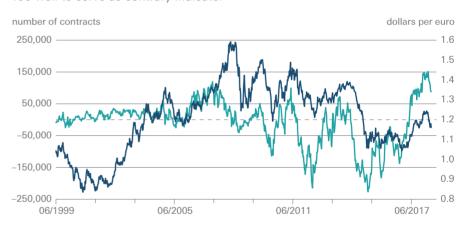
had gone slightly overboard with their dollar skepticism and euro euphoria, we simply waited for the right time to implement our strategic view tactically.

This happened on April 24, when the signals provided by technicals were also favorable.

As my colleague, Stefanie Holtze-Jen, puts it: "For some months now, both chart formations and position data have been providing us with important signals for our forex strategy. Especially when we observe extreme values."

FUTURES EXCHANGES: HOW DO THE PROFESSIONALS FARE?

Too well to serve as contrary indicator



■ Net euro long positions* of non-commercial dealers on the Chicago Mercantile Exchange

■ EUR/USD exchange rate (right axis)

*Difference of buy and sell positions Source: Thomson Reuters Datastream as of 6/19/18

⁹ Klitgaard/ Weir: "Exchange rate changes and net positions of speculators in the futures market", FRBNY Economic Policy Review, May 2004 The authors show based on trading data from 1993 to 2003 that knowledge of the positioning of speculators could explain ⁷⁵% of the currency movement, but only for the same week. The positioning did not, however, serve as a forecasting tool for the coming week.

THE LAST FEW WEEKS – DOL-LAR STRENGTH AND EURO WEAKNESS

The dollar surprised the market with its breakout in April. As a result it did what – going against the consensus – we had expected at the end of the first quarter. This was the correction of the – in our view – unjustified phase of weakness since the beginning of the year.

But the euro weakness triggered by turmoil in Italy at the beginning of May was not in line with our base scenario. It helped to explain why our target of 1.15, in place since the end of 2017, was hit sooner than anticipated.

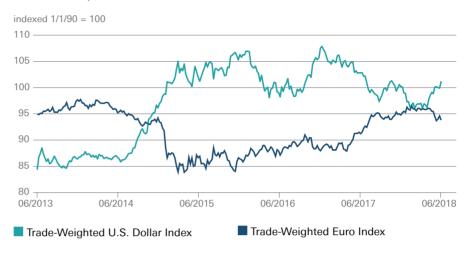
WHERE DOES ALL THIS TAKE US? TO OUR NEW, OLD TARGET

With this paper we have attempted not only to communicate our most recent strategic decision on the dollar but – beyond that – provide an insight into the special characteristics of the forex market. In particular we wished to show that:

- _ currencies are a special investment class, not least because roughly half the players in the market are not trying to make a profit.
- _ different explanations can always be found for the weakness of one currency or the strength of another.
- _ the cause of a currency's appre-

PHASES OF DOLLAR AND EURO STRENGTH AND WEAKNESS

Sometimes up, sometimes down



Source: Thomson Reuters Datastream as of 6/19/18

ciation may contain the seed of its subsequent depreciation.

- _ there are two ways to generate excess returns in the market: have non-consensus forecasts that ultimately prove correct; or recognize early which of a currency's shortor long-term drivers will be the next focus for investors.
- _ there are currently good reasons why the record yield spread between the United States and Europe is not dominating EUR/ USD.
- _ some U.S. fundamentals make us more cautious about the dollar in the long term.

What has ultimately emerged from this is our new, old 12-month call of 1.15 dollars to the euro. We believe that the U.S. twin deficit, the increas-

ing disengagement of the United States from international agreements and organizations as well as the persistent erratic behavior of the U.S. Administration will be a drag on the dollar in the long term.

For now, however, we think the key driver – alongside sentiment and positioning – is the dynamic of two key numbers: GDP growth and the development of key interest rates. In terms of growth the United States surprised positively in the first quarter while Europe disappointed slightly.

We have adjusted our 2018 and 2019 forecasts accordingly. However, high expectations in the United States and caution on Europe could see the former disappoint and the latter produce a positive surprise. Sentiment in

Europe is closely tied to events in Italy and Berlin and the degree to which they slow down further development of the European Union.

The picture could be similar for key interest rates. The spread between U.S. and European benchmark rates is at all-time highs. But it is not the spread per se that determines the EUR/USD rate but how it develops going forward, and how market expectations evolve. Based on the

most recent decisions from the Fed and the ECB, the coming twelve months appear to be pretty much set in stone. But speculation on the future direction of the ECB will probably set in well before Mario Draghi leaves office in the fall of 2019. We see market players tending to assume that policy will tighten.

The view of Stefanie Holtze-Jen is that: "At the moment, we think the strengths and weaknesses of the

euro and the dollar are in large part adequately reflected in the exchange rate. In the coming months we shall monitor exactly whether and when the long-term concerns about the dollar overshadow the short-term concerns about the euro. The U.S. midterms in November, which might trigger renewed skittishness in the market anyway, could also still play a role here "

Glossary

» Here we explain central terms from the CIO Special «

The Bank for International Settlements (BIS) is the international organization of central banks.

Bretton Woods in the U.S. State of New Hampshire was the site of an international conference in 1944, which established a system of largely stable currency exchange rates between leading Western nations, an arrangment that lasted until 1973.

Bunds is a commonly used term for bonds issued by the German federal government with a maturity of 10 years.

The Christian Social Union in Bavaria (CSU) is a Christian democratic and

conservative political party in Germany that only operates in Bavaria and that is considered center-right in the German political landscape. The CSU is the sister party of the Christian Democratic Union of Germany (CDU), which operates in the rest of Germany.

Correlation is a measure of how closely two variables move together over time.

The correlation coefficient measures the strength and direction of a linear relationship between two variables.

The current account includes trade in goods and services, a net-factor-

income balance (e.g. earnings on foreign investments and cash transfers from individuals working abroad) and transfers (e.g. foreign aid). It is a part of the balance of payments.

The euro (EUR) is the common currency of states participating in the Economic and Monetary Union and is the second most held reserve currency in the world after the dollar. The European Central Bank (ECB) is the central bank for the Eurozone.

The European Union (EU) is a political and economic union of 28 member states located primarily in Europe.

The Eurozone is formed of 19 European Union member states that have adopted the euro as their common currency and sole legal tender.

Fiat money carries no intrinsic value and is not tied to any commodity.

The Five Star Movement is a populist political party in Italy. It is led by the popular comedian and blogger Beppe Grillo, who was also among its founders in 2009. It is considered anti-establishment, environmentalist, anti-globalist and Eurosceptic.

FX or foreign exchange is the currency — literally foreign money — used in the settlement of international trade between countries.

Fundamentals are data giving information about the general well-being of companies, securities or currencies and serving for the subsequent valuation of these as an investment opportunity.

Greenback is a commonly used expression for the U.S. dollar.

The gross domestic product (GDP) is the monetary value of all the finished goods and services produced within a country's borders in a specific time period.

Hedging costs are similar to an insurance premium paid for not being exposed to price movements of certain financial assets. The premium paid for an option is a typical cost of hedging. Inflation is the rate at which the general level of prices for goods and services is rising and, subsequently, purchasing power is falling.

The Lega (formerly "Lega Nord") is a right-wing populist party in Italy. It was founded in 1991 through the merger of various parties. It is considered anti-globalist and Eurosceptic.

Mean reversion is a theory that prices and returns eventually move back toward the mean, or average.

In economics, a real value is adjusted for inflation.

Renminbi (RMB) is the currency of the People's Republic of China.

A safe-haven investment is an investment that is expected to retain or even increase its value in times of market turbulence.

The spot rate is the market price of a financial asset in transactions with immediate settlement.

The Swiss franc is the currency used in Switzerland.

Technical analysis is a tool used by capital market participants that want to forecast the development of security prices by detecting patterns in past market data such as prices and volumes.

Treasuries are fixed-interest U.S. government debt securities with different maturities: Treasury bills (1 year maximum), Treasury notes (2 to 10 years), Treasury bonds (20 to 30 years) and Treasury Inflation Protected Securities (TIPS) (5, 10 and 30 years).

A twin deficit is a simultaneous fiscal and current-account deficitder annualisierten Verzinsungen von Rentenpapieren über verschiedene Laufzeiten

The U.S. dollar (USD) is the official currency of the United States and its overseas territories.

The U.S. Federal Reserve Board, often referred to as "the Fed", is the central bank of the United States.

The United States Congress is the legislature of the federal government. It is comprised of the Senate and the House of Representatives, consisting of 435 Representatives and 100 Senators.

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