Harnessing timely data for better FX decisions

As FX trading volumes are subject to significant fluctuations, analysts require regular, monthly data to obtain insights and make more informed decisions. This is especially true for emerging market currencies, where very little market data is published.

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Introduction

Data is the lifeblood of effective analysis, and this is especially true of OTC FX markets. Today, FX analysts have access to a wide range of high quality data sources, but the timeliness of data can be a challenge, especially given rapidly changing market conditions. The most comprehensive and authoritative industry-wide data source, the BIS survey, is currently published at three year intervals. This paper contends that SWIFT data can be used as a complementary source to support effective analysis of OTC FX markets at monthly intervals, thereby bridging the gap between BIS survey publications. It also demonstrates how some of the key questions and trends in FX markets are currently demonstrated by SWIFT data analysis.

FX analysts currently have access to data from central banks and from CLS, as well as data from the BIS triennial survey. This is regarded as the most authoritative and comprehensive source of data on trading patterns in the OTC FX market. The latest survey involved 53 jurisdictions and 1300 banks and other dealers.

The BIS triennial survey was last conducted in April 2013, with the next survey expected in April 2016. Preliminary results are typically published around September of that year, with final results in December. The results are always eagerly anticipated, extensively analysed by the industry and widely discussed and quoted in the press.

The nature of the FX market is that there are large fluctuations in trading volumes, day by day and month on month. More frequent access to currency level FX data would allow market analysts to develop a timely view of market trends and fluctuations, and gain additional understanding of developments between the triennial surveys.

There is therefore a clear opportunity to enrich the data available for use as the basis of FX market analysis – to achieve more frequent insights and a more comprehensive picture of activity, especially for emerging market currencies.

This paper demonstrates how information derived from SWIFT FX trade confirmation messages can offer very timely insights into FX market trends and developments. We will ask a series of key questions raised by FX analysts, and show how SWIFT data can shed light on the answers. These new insights can be used by FX market practitioners as a complement to other data sources, to analyse market trends, perform benchmarking and to increase understanding of FX market dynamics to support better business decisions.

SWIFT's FX confirmation data

First, some background on the origins of SWIFT's FX data. The SWIFT network and SWIFT standard messages have for many years been used as the industry norm for post-trade confirmations of OTC currency trades. In particular, the well-known MT 300 message is used across more than 200 countries by almost 7,000 organisations, including banks, brokerages, investment managers and corporates, to confirm basic FX instruments, such as spot and forward trades.

Typically, the back or middle office of each party to the trade sends an MT 300 to the counterparty. This message includes, among other data, the key economic terms of the trade. Both parties match their outgoing confirmations with the incoming counterparty confirmations, to ensure that they have legal and operational agreement on the terms of the trade. In cases where the confirmations initially do not match, one party or the other will usually send a correction until a match is achieved.

Around 200 million MT 300s are sent across SWIFT each year. The vast majority of these are for FX trades that do not settle across CLS[1], typically because one or both of the counterparties are not users of CLS, one or both of the currencies are not settled by CLS or the product is not supported by CLS (such as a non-deliverable forward (NDF)).

Since October 2010, SWIFT has been able to draw upon specific data fields within the body of MT 300 messages, in order to develop aggregated reports, and make that data available to SWIFT users on a monthly basis. We can see, for example, that during 2013, MT 300 confirmations included some 160 currencies and more than 1,200 currency pairs, from Dollar-Euro - with over 20 million confirmations in the year - to currencies such as the Bhutanese Ngultrum (BTN) and Salvadoron Colon (SVC) with only a handful of confirmations across the year.

Where are the opportunities in emerging market currencies?

While the top currencies and currency pairs are well known and reported by the BIS[2] and other central bank surveys[3], there is very little market data available for other currencies and currency pairs. Emerging and frontier market currencies, in particular, are often traded by voice or through other manual means, with the result that there is little reliable market data available derived from automated processes. Yet developing business intelligence about the trading patterns of up-and-coming currencies is a priority for many organisations.

An important trend during the past few years has been the relative growth in emerging market currency trading, as compared, for example, to trading in the 17 currencies that are settled by CLS[4].

In absolute terms, trading in emerging market currencies is considerably lower than in the 17 CLS currencies, as evidenced in Figure 1[5]. However, the relative growth patterns are quite different, as shown in Figure 2. This is particularly noticeable after mid-2013, at which time trading patterns between CLS and non-CLS currencies appear to have diverged considerably.
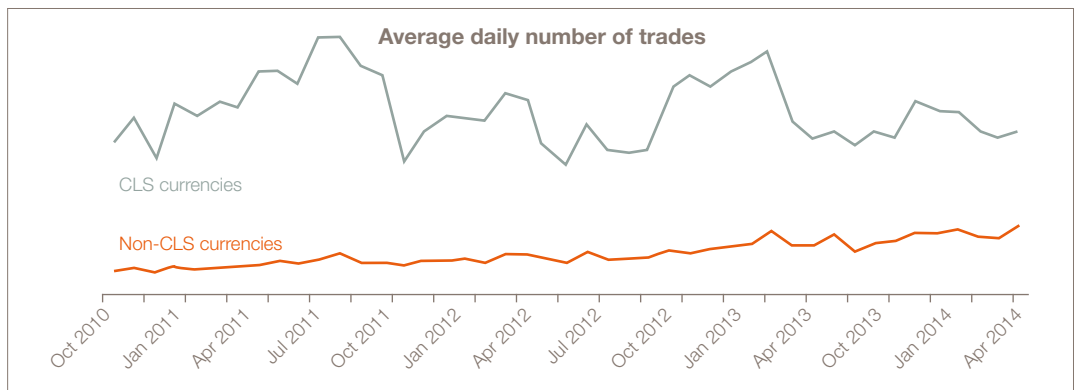

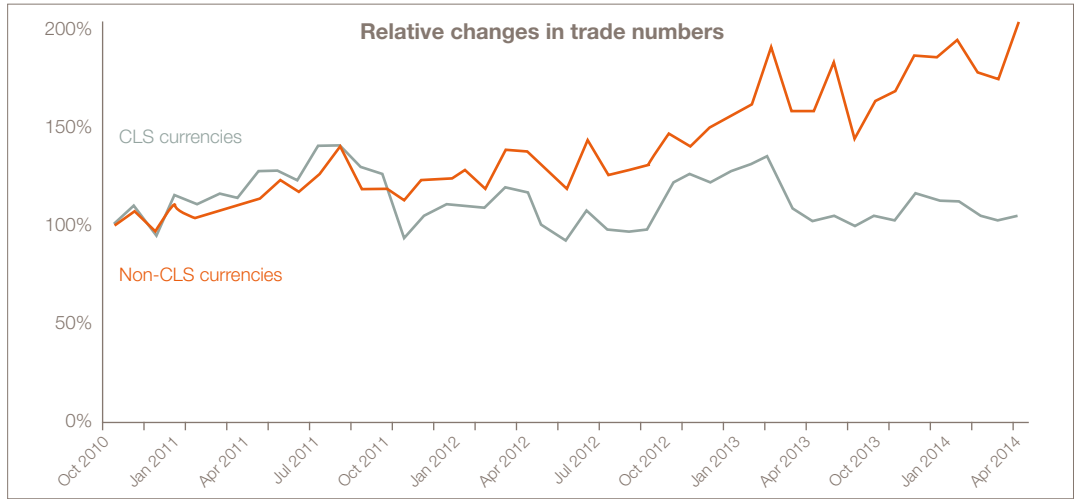∧ Figure 1 - Source: SWIFT Watch MT 300 average daily volumes Oct 2010-June 2014

(1) See www.cls-group.com
(2) The BIS reported detailed results for 35 currencies and 39 currency pairs.
(3) Published twice yearly (for April and October data) by several central banks, including the Bank of England and the New York Federal Reserve. These surveys focus only on trades relevant to that particular jurisdiction. The data from separate central bank surveys cannot be easily aggregated.
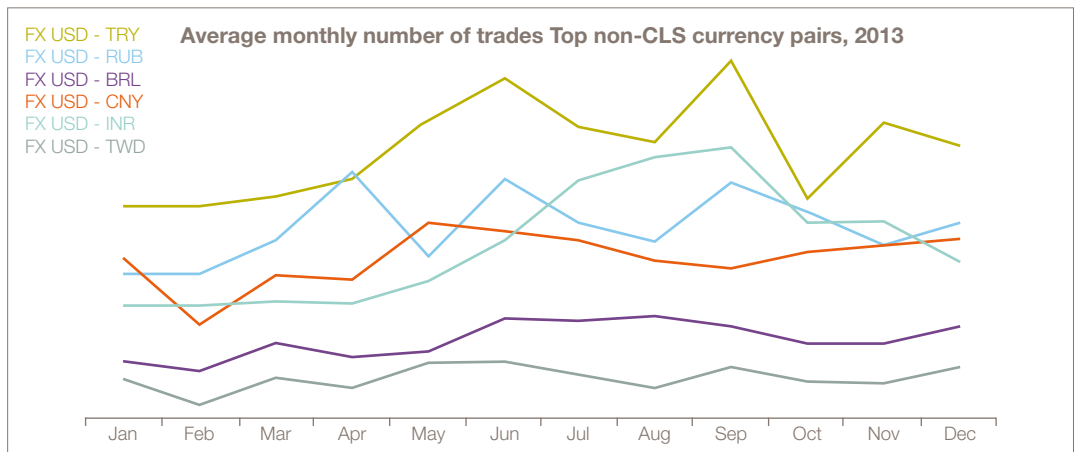(4) AUD, CAD, CHF, DKK, EUR, GBP, HKD, ILS, JPY, KRW, MXN, NOK, NZD, SEK, SGD, USD, ZAR
(5) With non-CLS MT 300 volumes rising from around 15% to 30% of CLS currency MT 300s over the period October 2010 to June 2014

Relative changes in trade numbers
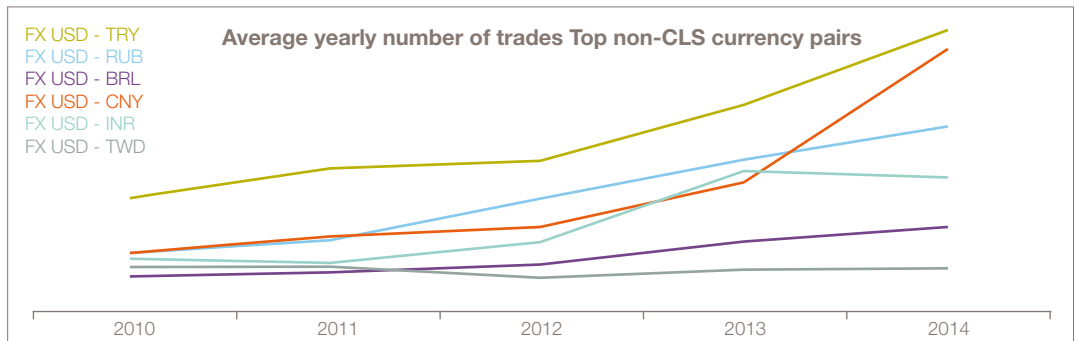
CLS currencies

Non-CLS currencies

▲ Figure 2 - Source: SWIFT Watch MT 300 average daily volumes Oct 2010-June 2014

Month-on-month fluctuations in trading volumes for individual currencies can be 25% or more, as evidenced in Figure 3[6]. However, if we look at changes over a longer period, there is a clear general growth trend for emerging market currencies as evidenced in Figure 4. A broader analysis across numerous currencies undertaken by SWIFT has shown shows a similar trend, with just a few outlier currency pairs.

FX USD - TRY
FX USD - RUB
FX USD - BRL
FX USD - CNY
FX USD - INR
FX USD - TWD

Average monthly number of trades Top non-CLS currency pairs, 2013

▲ Figure 3 - Source: SWIFT Watch MT300 monthly volumes for selected non-CLS currency pairs

FX USD - TRY
FX USD - RUB
FX USD - BRL
FX USD - CNY
FX USD - INR
FX USD - TWD

Average yearly number of trades Top non-CLS currency pairs

▲ Figure 4 - Source: SWIFT Watch MT 300 yearly volumes for selected non-CLS currency pairs

(6) The data analysis in this document is based on all confirmations in the relevant currency or currency-pair and makes no distinction between buy and sell confirmations.

Which emerging market currencies are internationalising – and why?

The BIS addressed this question in a paper within its December 2013 Quarterly Review. It concluded that FX market growth in emerging market currencies is driven mainly by growth in derivatives markets, and that since an increasing share of emerging market currencies is traded offshore, these currencies are indeed becoming more international. However, this is more true of some emerging market currencies than others.

The charts below show how SWIFT data provides further evidence of the varied internationalisation of currencies – clearly demonstrating a distinction between highly-traded internationalised Turkish Lira (TRY) and the more domestically-focused Pakistan Rupee (PKR). The charts depict volumes of confirmations sent between organisations in different countries. The width of the connecting links is proportional to the volume of confirmations that are exchanged between the two countries[7]. The charts have been filtered to show only the higher volume links.

As shown in Figure 5, TRY trading appears to be largely centered on the UK. Further, Figure 6, which shows TRY-USD trading for September 2013 (a higher-volume month), indicates that much of the increase in volume was centered around the UK. This could suggest that the increase in TRY trading is not directly related to primary sources, such as trade, but rather relates to secondary sources, for example either speculation or offshore investment.

By contrast, the web of links emanating from Pakistan in Figure 7 shows clearly that Pakistan Rupee trading is largely domestically based, with Pakistan clearly the centre of USD-PKR trading. This is consistent with the view that the bulk of PKR trading is being done to support primary needs, such as import and export, and remittances.

∧ Figure 5 - Source: SWIFT Watch MT300 USD-TRY geographic spread Jan 2013

∧ Figure 6 - Source: SWIFT Watch MT300 USD-TRY geographic spread Sep 2013

∧ Figure 7 - Source: SWIFT Watch MT 300 USD-PKR geographic spread Sep 2013

(7) This is derived from the SWIFT MT300 sending and receiving BICs, which is an imperfect measure, as it does not properly account for confirmations that are sent on behalf of another entity.

What is really happening with RMB?

The development and growth of Chinese Renminbi (RMB – currency code CNY) during the past few years has obviously attracted a great deal of interest. Figure 8 shows how RMB as a currency for worldwide FX trading has outgrown many other currencies in recent times.
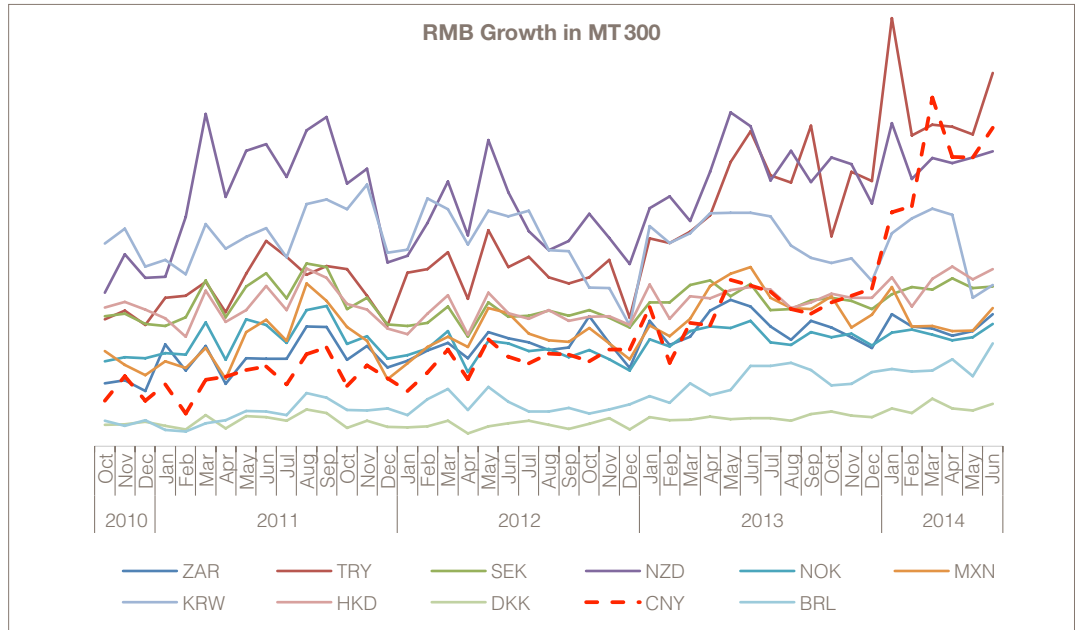

^ Figure 8 – Source: SWIFT Watch monthly MT 300 volumes for selected currencies, highlighting RMB

Figure 9 and Figure 10 on USD-CNY volumes show a clear evolution from 2011 to 2014. The flows out of London have increased considerably - and in particular to destinations other than mainland China. A similar view of month-by-month changes to traffic flows can provide greater insights into FX trading patterns, as well as underlying economic developments.

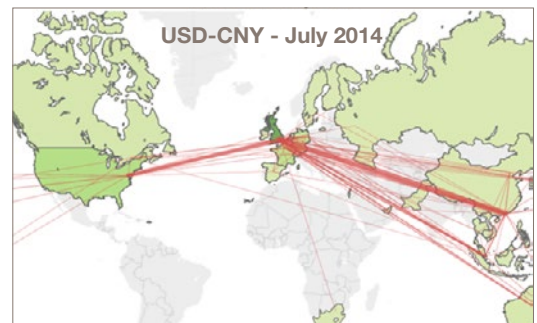^ Figure 9 - Source: SWIFT Watch MT 300 USD-CNY geographic spread Jul 2011

^ Figure 10 - Source: SWIFT Watch MT 300 USD-CNY geographic spread Jul 2014
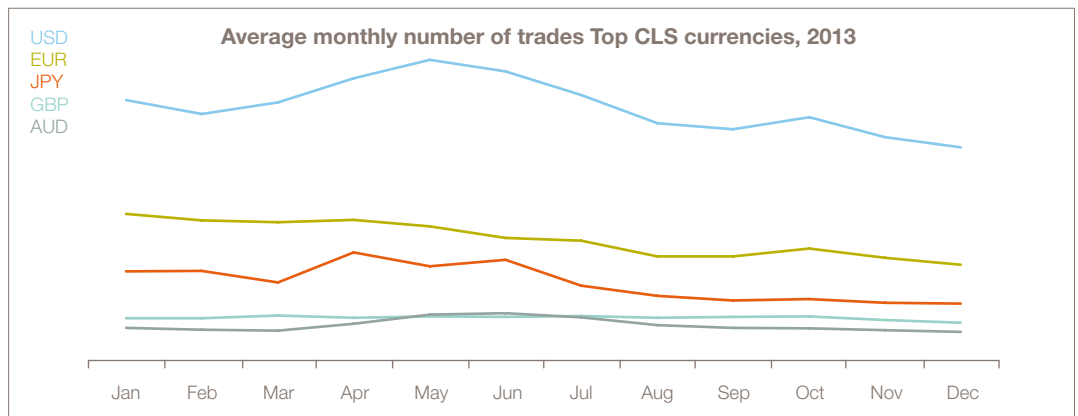
Where are the trading correlations?

Another area of interest to FX market analysts is whether there are correlations in changes in trading volumes between different currencies. For example, does FX flow move between currency pairs, or do trading volumes in pairs change in sync?

Analysis of SWIFT monthly traffic data provides a unique insight into correlations at a global level between different currencies, regions and trading corridors.

For example, Figure 4 shows there was a high level of correlation between CLS and emerging market currency trading up until June 2013, but from that point the relationship appears to have broken down altogether. Ongoing analysis could show whether this is indicative of a macro change in market behaviour, or whether it is a short term anomaly that will revert to longer-term trends in due course[8].

Figure 4 shows further that there is little correlation between changes in trading volumes in different emerging market currencies, with individual currencies being affected by local considerations. Likewise, Figure 11 and Figure 14 demonstrate that the main CLS currencies also follow their own trajectories.
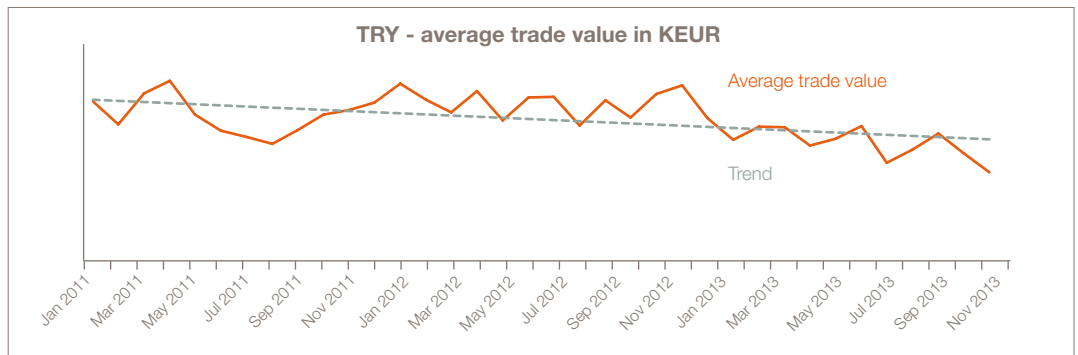
Our initial conclusions would therefore be that currencies tend to follow their own paths and there is little indication that FX trading flow 'switches' between currencies.

Average monthly number of trades Top CLS currencies, 2013

USD
EUR
JPY
GBP
AUD

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

⋀ Figure 11 - Source: SWIFT Watch MT 300 average monthly volumes for top currencies 2013

What is happening to FX trading values?

Analysis of SWIFT FX confirmation data can be extended beyond the number of trades, to look at various other parameters – most especially the values contained in the MT 300s. Figure 12 shows how traffic analysis can offer further insights into changes in trading values over time.

TRY - average trade value in KEUR

Average trade value

Trend

Jan 2011 Mar 2011 May 2011 Jul 2011 Sep 2011 Nov 2011 Jan 2012 Mar 2012 May 2012 Jul 2012 Sep 2012 Nov 2012 Jan 2013 Mar 2013 May 2013 Jul 2013 Sep 2013 Nov 2013

⋀ Figure 12 - Source: SWIFT Watch MT 300 values for TRY trades 2011-2013

(8) It is also feasible, of course, that the change somehow relates to a modification in use of MT 300s, but this too is not immediately obvious.

How does SWIFT data complement other FX data sources?

The BIS triennial survey is always based on data for the month of April. Trading volumes in the FX market vary considerably from day to day and even more so from month to month. It is therefore useful to add context to the BIS survey data by considering trading volumes in the survey month, relative to other months, i.e., was it a particularly busy, quiet or average April? Figure 13 shows average daily MT 300 volumes over a period covering the last three BIS triennial surveys. The chart, which is to scale, clearly demonstrates the considerable variation in confirmation volumes from month to month. It also shows that activity was particularly high during the April 2013 survey - indeed it was above the long-term trend line - and fell away significantly during the latter half of 2013.

Previous BIS survey months were quieter months than average. In fact, the jump from April to May 2010 is quite remarkable and is likely associated with the implementation of the Greek austerity measures and risk of contagion across the Eurozone periphery in that month.
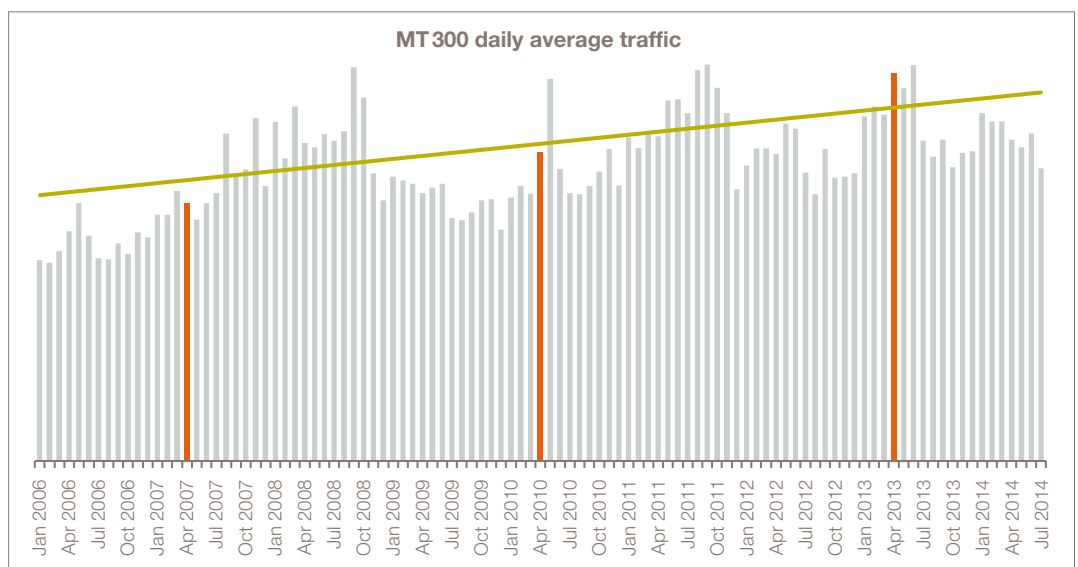
Figure 13 - SWIFT Watch MT 300 average daily volumes by month 2006-2014

The BIS published a paper in its December 2013 Quarterly Review[9] which attempted to assess changes in trading patterns between the triennial surveys conducted in 2010 and 2013 and in the months following. It used various measures, including biannual central bank surveys and CLS monthly reports, to ascertain what might have happened. The paper concludes that the $5.3 trillion per day reported in the triennial for April 2013 was a 'local peak', with activity falling to $5 trillion per day in October of that year. It suggests this fall was driven by a fall in spot transactions involving the euro or yen – with the fall in euro trading the continuation of a trend that started in late 2011, and the fall in yen trading a partial reversal of the sharp rise seen in late 2012.

Figure 14 shows how SWIFT data provides some additional colour to this hypothesis, by demonstrating that EUR trading appeared to peak in the second half of 2011, and has had a gradual decline since that time. JPY trading has in general been volatile, although presenting an overall upward trend in the period of October 2011 to June 2014.

More detailed analysis of SWIFT traffic, however, confirms the BIS statement, that the fall in average daily volume between April 2013 and October 2013 is largely accounted for by a significant drop EUR and JPY trading.

As shown in Figure 14 below, by contrast, trading volumes in GBP (chosen purely as an example) have been much less volatile during this period. More detailed analysis of the SWIFT data shows that this is true for most of the other major currencies[10].
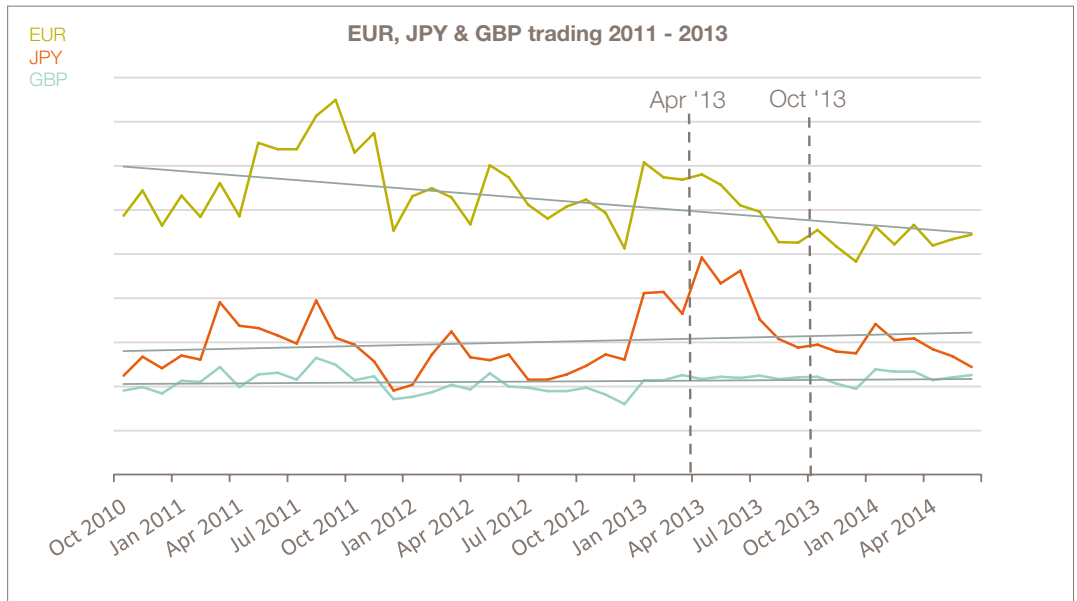
⌃ Figure 14 - Source: SWIFT Watch MT 300 volumes Oct 2010-Apr 2014

The peaks in EUR volumes in August 2011 and April 2013 are aligned with phases of the Euro crisis, namely the Greek and Cyprus bailouts respectively, with the smaller peak in June 2012 possibly related to loans for shoring up Spanish banks.

With respect to the JPY peak during the first half of 2013, this is likely related to FX trading on the back of 'Abenomics', when the Bank of Japan announced in April 2013 that it would buy Japanese government bonds and double the nation's monetary base to 270 trillion yen by the end of 2014.

Timely data: the key to deep insights into FX market trends

Against a backdrop of rapidly fluctuating trading volumes and a paucity of market data about emerging market currencies, SWIFT FX confirmation data offers a timely and rich source of additional information for FX market analysts.

In this paper we have tackled some key questions about FX trading trends, and with analysis of SWIFT data have shown a clear and substantial pattern of growth in emerging market currency trading, as well as distinct differences in the internationalisation of emerging market currencies, including RMB.

The BIS triennial survey remains the benchmark report on FX industry growth and developments. The detailed information it provides is unparalleled. In this paper we have shown that analysis of MT 300 volumes, broken down by currency, confirms many of the findings of the BIS survey of April 2013. In addition, our analysis shows that there are considerable monthly variations, both overall and per currency, that can be used to enrich the conclusions of BIS triennial surveys and shed further light on the market developments and fluctuations that take place between BIS surveys.

Successful market analysis relies on data, and in this paper we have shown just some of the ways in which SWIFT's FX confirmation data can be used to complement other sources of information and provide timely insights into key trends in FX trading globally.

Note: The charts in this document have been produced using SWIFT's Business Intelligence solution, Watch Value Analytics. By using such a solution, FX market analysts can build their understanding of currency trends and use this important data source for developing business strategy across many SWIFT clients, including dealers and currency managers.

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