A Presentation for AFP 2020 Treasury & Finance Annual Conference

AFP 2020
LAS VEGAS | OCTOBER 18-21

SCRIPT-AFP

The Future of Integrity and Data Analytics in Foreign Exchange

Presented by:

Bob Blades
President

Jack Borland
Managing Director of
Foreign Exchange

Blades International, Inc.

Table of Contents

The Future of Integrity and Data Analytics in Foreign Exchange

I.
Intro and FT Article

Intro Welcome and Humor - Good & Bad

Thanks, and as we talk about FX…. and how we see **Integrity and Data Analytics** playing larger Roles in the FX markets, I am reminded ....about how my colleague **Jack Borland**--who you will meet later--had a **Foreign Exchange Salesman** on his team that was **really really Good.** He was one of my favorites**.** It was about 20 years ago when we Both worked together at JPMorgan Chase. The guy was a **Good** FX **Wizard.**..and Jack knew how much I liked him as my FX partner...

- ➢ He was **Really Good** at Forwards & Swap, Options, **Good** at Structured deals....**Good** with Clients....
- ➢ But he died. That was ... **Bad! Really, Really Bad, I miss him...**
- But, I still have great Memories of Him as he was **really, Really GOOD**
- Well ....he went to the **Pearly Gates, and saw St. Peter**....(only now audience realizes a Joke!)
- He was told he could look around this **GOOD Place**...and see what he thought!
- And, he could then go **DOWN.**..and see that **BAD Place** and see what he thought!
- Well at the **GOOD Place**, he saw **Angels floating on clouds.**..lots of Harps and, you know such...
- So, The **Foreign Exchange Salesman** goes to St. Peters and said I don't Know....how about the other place....
- So, he was shown to the Elevator and went Down to the **BAD Place....**
- There he saw a beautiful **GOOD** green lawn with golf courses, swimming pools, parties and a man in a **RED suit** showed him around....
- He liked it... so he went back up and told St. Peters, He would prefer the **Bad Place,** .....so he went down the Elevator again.
- This time, the Man in the Red Suit was different—evil—**BAD**-- he had a pitchfork, and there was fire, screaming and torture...it was R**eally Really Bad...**
- The FX Salesman-- the Wizard-- looked at the man in the Red Suit...and said **Wait..Wait!**...what is going on! ... When I came down before it was so V**ery Very GOOD.**
- **He said, Yes, before you were a Prospect**
- **BUT .....Now, you are a CLIENT!**

(TIMING....quickly to)…
I share this Story to highlight there **is Good and Bad!**
Indeed, we have all seen plenty of **Bad** this year with the virus, social unrest, and intense politics....However, there has also been a lot of good….., we are getting by and learned how to work remotely and better use technology. Banks and financial institutions were forced to work remotely and they did pretty well...... Looking at our Talk and the role of Integrity and Data Analytics in Foreign Exchange,....We have seen a lot of GOOD....and a greater interest in our

work in light of technology enhancements and what can be done to see more FX Data and enter into FX Agreements based on Integrity.......... **And THAT is GOOD.....**

To start let me tell you about a Professor from Geneva, Switzerland...and his work.

FT Article: Banks Accused of Overcharging Customers for FX Services

Last year, the Financial Times published an article on banks and Foreign Exchange Providers taking advantage of customers on FX —the common theme was smaller customers were overcharged for FX Services. The overcharging occurred in the form of opaque and typically high FX Markups.

The article focused on a research paper published by University of Geneva professor Harald Hau and his colleagues. The study focused on the *"Discriminatory Pricing of Over the Counter Derivatives".* The professor highlighted how more sophisticated clients are likely to incur lower FX transaction costs.

To Quote Hau, "The elephant in the room is that dealers systematically and consistently overcharge clients who don't have currency trading expertise". Additionally, he suggested smaller clients were more likely to pursue methods of trade execution that are deemed "unsophisticated", resulting in higher transaction costs—we'll cover this later.

That Financial Times article highlighted that "Markups" can be 25 times higher for smaller clients than for bigger, more sophisticated customers". We really enjoyed seeing this study by Professor Hau, as years ago we developed the Borland Curve to reflect this market reality.

It is my pleasure to introduce my longtime colleague, Jack Borland who led the JPMorgan Chase FX team in Houston for years. (AFP Intro)

II.
Borland Curve

Thank you for that kind introduction!

The Borland curve is a way to look at the fair markup price for transactions. It is not a statistical portrait but it is based on 35 years of FX management experience. So, it is more of a slurve than a curve.

There are 2 basic outlooks on FX pricing by financial providers:

The first and most common outlook is to charge whatever the client will bear until you get caught. Then apologize, explain that it was an abnormal event caused by an inexperienced staffer or the operations group or a system hiccup. Then tighten pricing until you feel you can start moving it up again.

For the banker, the key to the success of this practice is client indifference or inexperience. Inexperience can be cured by time, but indifference usually requires an intervention!

The second outlook on pricing balances the costs of the overall pattern of activity against the value of that pattern.

III.

How Are FX Markups Determined?

The size, currencies, and method of trading all affect markups. Of course, costs are a key factor and include the following:

- **Administrative costs**.

This is the most rapidly growing cost much of it mandated by regulation including know your client processes, anti-money laundering reviews and blocked recipients of various kinds. Banks have developed automated systems to provide a basic review, but staff review is necessary to ensure these compliance issues are managed.

- **Operational costs**.

In-coming and outgoing payments for non-financial clients usually must be delivered. Most of this managed by computer and 99.99% go through without issue. When they go wrong finding and recovering these payments can be time consuming and expensive. Particularly if the currency is considered exotic and the regulatory client in the receiving country is arcane.

- **Credit costs.**

This is the most commonly cited cost, but it is easily managed and only rarely requires intervention. In 40 years, I have had only 2 credit issues of any size. And one was caused by the Bank President's irritation with the client.

These costs must be balanced by the value of the client's pattern of activity.
The most valuable client is well known to the institution, has a large regular flow of market size transactions in major currencies, dealt for even dates, delivered to known clients with repeated delivery sets and transacted through the bank's proprietary systems. So, high value and low costs.

These clients are too valuable to overcharge and they know the market!
IF THIS IS YOU YOUR MARKUP SHOULD BE CLOSE TO 0!
But if you want to send $5,000 dollars worth of Bangladeshi TAKA for delivery tomorrow in Tongi, THAT'S GOING TO BE EXPENSIVE.
Oddly enough even valuable clients with sophisticated FX teams are often overcharged for FX transactions. These transactions are delivered via the cash management systems. Often no one monitors these deals because they are considered to be of lesser value. That is not always true for individual deals and is never true for the aggregate. This is another form of indifference.

The costs of FX transactions have been coming down with increased transparency, efficiency and competition and we believe this will continue. But to take advantage of this trend a client must take steps to be aware of the total value of all their FX activities and their place along that blue line!

As Jack said, FX MARKUPS WILL COME DOWN
We believe the FX market will become even more transparent, competitive, and efficient. FX Markups will come down over time. However, it will be what we call -- a Grind -- as FX Providers do not want to give up FX Markups.

We often look at the Trading of Equities—Stocks—and see how now the cost, or commission, for electronic equity trades in the Retail space is "Zero". What changes over the years from what use to be high fixed commissions. How can Banks and Brokers do this? They make money on the deposits, margin loans, other services, and sometimes selling the equity trade flows.

In the Global Foreign Exchange market, we believe increased Data Analytics and Technology capabilities will bring more Focus, Transparency, and Attention to FX Markups. In turn, that competitive "Grind" will bring those FX Markups lower.

A great deal of capital has gone into the Fin Tech industry to support FX Platforms, mainly for retail and small business. For example, in a relationship a Client may pay 2.0% on average in Bank FX Markups for a regular FX Flow. The Fin Tech comes along and learns the Markup is around 2.0% and wants to capture that business and give good service at 1.5%, just a little better. And that is being done and known as part of the "Grind". However, that same client with transparency and knowing how valuable that FX Flow can be to their Bank, may get FX Markups dramatically lower, perhaps as low as <u>25 or 50 basis points with Data Analytics and Rate Integrity</u>.

IV.

Who Can Benefit from an FX Rate Review?

Some companies are "Indifferent" to their FX costs.
Indifference is caused when Treasury Teams are too busy and preoccupied. "Indifferent" clients can either be inexperienced in FX payments or may simply be stressed, understaffed, or simply not care enough to monitor their costs. Some executives feel it is Okay to let their Bank take whatever FX Markups they want and just allow them to have "Rich FX Markups". Either way, a Markup review and Rate Integrity process can benefit clients who do not have the time or resources to consistently monitor every FX transaction.

Companies that use multiple banks, or a multi-bank automated competitive bid process, to manage FX activity can also benefit from a Markup Review. While obtaining competitive bids can result in good FX markups, this strategy can lengthen the process and complexity and FX Markups might inch up. This process can also systematically ignore the small Treasury FX Payments. We suggest a written, fair Foreign Exchange agreement, with one, two, or more banks, can be most efficient and effective in managing all FX costs in the long run.

Additionally, companies with global ventures or subsidiaries can greatly benefit from knowing how to monitor their FX markups in foreign countries. Corporates with a global presence are likely to have **"Pockets of FX Activities or FX Flows"** in multiple regions. They can often go ignored, and therefore, it is important to also successfully manage those FX Markups.

V.

Case Studies

To further explain the importance of knowing your FX markups we'll present three case studies—based on commercial deals.

Case 1 focuses on a Middle Market Company which was unknowingly paying an-- "Excessive FX Markup"-- along with modest FX fees. It is typical for Middle Market companies to be subject to high markups. As in this case, middle market companies can pay markups as high as over 300 BPs, where a more appropriate markup is around 50 BPs.

> The client's FX history was analyzed, through **a "Back Testing"** process of comparing FX rates to interbank market rates. The results showed Excess FX markups. Based on the Market Data and FX Rate Integrity Process, the client was able to obtain a Fair FX markup of 50 BPs for the annual FX flow of about $2 million.
>
> With the Market Information and Data Analytics, the company was ready to go to their bank to negotiate an FX Arrangement. Their bank readily agreed to an FX Markup of only 50 BPs and to eliminate additional fees, as the Client was also paying $15/ FX Wire Transfer. So, they knew about $1,000 in Wire Transfer Fees per year, but were actually paying Fees and Markups of about $65,000 per year. Once confronted with the data, the bank acknowledged the past FX Markups were indeed high; they lowered the Markups and their relationship was fine.

CASE 1.B: However, in the Case 1B Slide, we show that 6 months later, this Client had High Markups as a result of a Mistake. The client had, **" A Negotiated FX Markup Agreement"** with their bank, but it was a verbal arrangement which lacked details. The Bank used a computer-generated algorithm to determine the Markups as the company did these trades over their internet banking system.

Well...the error, of Markups going as high as 3.39%, went unnoticed for about 1 month, until the bank was confronted and fixed the clients pricing algorithm. The Bank apologized, said they were sorry, and they explained the algorithm was attached to another company, and when they changed the algorithm for the other company, they inadvertently, accidently, by mistake, changed the clients... But, not to worry, they changed it back. The regular FX Rate Integrity Review caught the mistake.

The client was then able to further codify and reconfirm their Agreement for only **50 Basis Point Markups**. This yields an Annual Save of over $50,000 on this $2,000,000 FX Flow. Later, in our work we saw the FX Flow triple which meant the Save on an annual basis was even greater, over $160,000 per year, and for a company this size the Save was very meaningful for the bottom line.

CASE 2: A corporate client was selling product in Europe, receiving monthly payments through their US Bank.
These payments were hedged using outright forwards to be settled on the projected payment date. The forward prices were high given the transaction size and the client's standing with the bank. As is often the case the proceeds arrived on a different date and were a different amount. The bank was using these adjustment transactions to increase their overall markup.
BII advised the client to change to a three-month window forward to avoid most of the adjustment transactions and to request an agreed pricing matrix. Their bank refused to adjust their pricing.
BII then advised the client to issue a request for proposal among their line banks including a pricing grid that included a price for the large transactions over EUR 1,000,000 and a separate price for the smaller transactions. A regional bank among the line banks offered a grid of 3BP for the large transactions and 20 BP for the other deals.
The result was a reduction in their hedging markups from 67BP to 3BP as detailed on this chart.

Thanks Jack, that was quite a Deal where you helped that Company Lower their Markups by 95%.
CASE 3.A A Global company with over a $90million annual FX Flow was using two banks. With multiple subsidiaries they agreed that an FX Markup review would be good and provided a "Limited Amount" of information on just one subsidiary. This initial Limited review actually highlighted the company had "Okay FX Markups" for the limited volume, of the one subsidiary. They had Fair FX Markups--it appeared-- but it was a SAMPLE of only one subsidiary, for only a few months....

A couple of years later, the Global company agreed to a more thorough second FX Markup review and they found First, the good Markups were not being maintained, and importantly, when they did all of the subsidiaries they realized they had a much larger volume and a FLOW approaching $100million per year. The second review found one bank had Markups as high as 79bps, and another bank that had said they were at 25bps, was really at 29bps.
This was notable as it showed:

1) FX Markups can change over time, and be opaque, and sometimes hard to understand. And,
2) When companies focus and drill down, they realize if they include **--"All FX payments**" -- they often have more Significant FX volumes than they assumed.

Armed with the **FX Data Analytics,** their true costs, and the volume of the FX, put them in a good negotiating position. They were transparent with their banks about needing more competitive FX Markups. One bank early on went to 10 bps for the regular FX flow. The other bank was at first reluctant to go to 10bps and wanted 15bps. However, when they realized the market was down to 10bps they too went to 10bps for significant FX volume. This generated **over $700,000** in annual FX Savings. Not one time but year after year.

CASE 3.B: In order to make sure their banks were maintaining the **10 Basis Point** agreement they had Monthly Rate Integrity reviews done.

> In the first month of review, the Rate Integrity process showed a sudden increase in Foreign Exchange Costs and Markups from one of the banks. This turned out to be due to a technology error on the bank's behalf. Once notified, the bank apologized and quickly fixed the error and issued a refund. Moving forward, the bank maintained their 10 BP agreement. It appeared the technology glitch was unintentional and the result of implementing a new algorithm.
>
> This type of error highlights why it is important to monitor your Foreign Exchange costs to make sure your agreement is respected and maintained. In this case, a simple error resulted in Excessive FX costs and the bank issued a $47,912 refund, which was within $33 of what our Jack Borland and the FX Rate Integrity review process indicated was due, highlighting the power of Data Analytics.

VI.

Now let's talk about what information is needed to complete an FX Rate Review?

A client needs the following:

- The "Time Stamp", the date and time a transaction was completed. And;
- The currencies involved. The amount of the DEBIT, or charge, and the amount of the CREDIT, or Foreign Currency Bought.

The highlighted information is all that is needed to successfully complete an <u>FX Markup Review</u>. The access you have to your own data is critical. The basic FX transaction data will enable you to precisely -- "Back Test"-- based on the exact time a transaction was completed.

It is important to stress, however, that in order to successfully complete a Markup Review you DO NOT need to provide any sensitive or identifiable data. A third party should never ask for sensitive information such as beneficiaries, or bank account numbers.

Once the required information is collected and a Markup Review is complete, you will receive the following:

First, the Precise Interbank Market Rate at the exact time your transaction was completed.

Secondly, assuming you used USD to buy Euros, the USD amount it costs a Bank to provide those Euros at the Interbank Market Rate.

Then, the Dollar Markup Cost—this is the difference between the amount you paid and the cost for the Bank.

Also you get, the Cost in Basis Points—which is your FX "Markup".
In summary, there will be a comparison of the **Actual Markups** to **the Agreed Markups**. This is an analysis to determine if you have received **FX Rate Integrity®.**

VII.

Defining a "Time Stamp"

Your "time stamp" is evidence of the exact time of your trade. Banks should provide this information or make it readily available. If a bank is hesitant, or resistant, to making this FX data available, it is a Red Flag. It represents a deliberate Lack of Transparency.

The first sample of time stamp data is from a client's internet banking system. Typically, clients can readily download this data (including Time Stamps) and receive it in Excel format.

The second sample is of a confirmation most clients receive from their banks: a **simple one-page confirmation** of YOUR FX trades. The one-page confirmation can be sent electronically or by mail.

We often spend a lot of time talking about Time Stamp quality and integrity. That includes making sure we use the proper Time Zone. It is your Data, and some banks would rather not share the precise Time Stamps. However, if we can put a "man on the moon", you can get your time stamp data.

VIII.

How do we know our company is using Best Practices to get rate integrity?

Executives that want to reduce their FX costs and maintain a consistent, competitive FX Markup, and achieve Rate Integrity, should implement the following practices.

First, you need market transparency and cooperation from your FX Providers to get the right FX Data. With the Data you should do "back testing", and "benchmarking". This will help you understand FX Markups and what has been paid, and help you learn about the value of your FX Flows

Second, with the analyzed FX Data, you are in a good position to negotiate and obtain favorable "FX Arrangements".

Third, you should have a process for continuous automated Auditing of FX Costs. This will help you achieve consistent, lower FX costs, and assure FX Rate Integrity®.

IX.

Let's talk about Bank Negotiations and FX Arrangements

Once a client knows their existing FX costs, they can more readily understand what they deserve. Do you know precisely how much your bank earns on your FX flow? How much your FX flow is worth?

Banks would rather not talk about set FX pricing; however, clients can readily negotiate a Fair FX Markup Arrangement. The negotiation is best backed up by the client's analyzed **Historic FX Data and Empirical Market Data.** Often, the data highlights the bank has had a history of **"Rich Markups"** for years and it's time for the client to have a candid talk and a customized and competitive arrangement.

Be confident you can and should negotiate a Fair Markup Agreement with your bank. In challenging times, banks want FX flows and should be willing to give their clients competitive FX arrangements.

When negotiations are done, at an appropriate time, have your new FX Arrangement codified with a written agreement, which can be simple. However, we stress that it is even more important to continually check and "Audit" those FX Markups.

X.

Auditing

To maintain FX Arrangements and ensure consistent Markups, executives should monitor their FX Costs and be aware of any changes.

Our CPA friends explain how auditing used to be a process of auditing 10 out of 100 transactions. However, with today's technology, CPAs explain we now have the tools and capacity to audit all 100 transactions.

With the time saved by automation, CPAs and Financial Executives have more time to dive deeper into the data to give more valued advice and expand consulting services. Having more FX Data due to audits, and using technology to analyze the Data, is an example of diving deeper and pursuing **FX Rate Integrity®.**

XI.
Conclusion

First, we want to thank you, the audience, and we plan to open it up to questions in a minute. We also want to thank Mike Connolly for being a mentor and helping us with this presentation. And, of course we want to thank the entire AFP team for support and for giving us this opportunity.

We see FX Markups going lower:

A) **Technology** enables us to do more and check thousands of FX transactions at a time, fostering Rate Integrity type pricing that can be readily audited.

B) Within technology, advanced **Data Analytics** is growing fast and helping clients in all sorts of ways. Accordingly, it makes sense that Data Analytics will increasingly be used in managing FX Markups.

C) The AFP, Kyriba, and others have written about how we will see more **Automation and Robotics Process Automation** as financial executives continue to do more with analytical tools. We will see more automation which, in turn, will help the growth of Artificial Intelligence. We have actually created an **FX Rate Integrity** site in the Cloud to automatically receive FX Data, so that we can use Robotics, or RPA, to have FX data sent more efficiently...and we are spending on development to make it easier, faster and cheaper to review FX data.

D) **Competition for FX Flows** has increased with the growth of the **Fin Tech** industry where a great deal of capital has been invested to develop FX platforms. There is ample FX execution "Capacity", which creates the "Grind" of markups slowly going lower, as banks and FX providers want to preserve margins.

It won't be overnight, but with Technology and Competition, FX Costs will continue to go down. We still see an **"Inefficient FX market"**, like Dr. Hau from Switzerland pointed out in that Financial Times article.

We enjoy analyzing the FX markets, learning new ways to achieve Rate Integrity, and believe you all are now wiser about how the FX Markets will change and become more efficient with **Integrity Pricing and Automated Auditing of FX flows.**

Thank you.