

Euro Crisis Fallout – What’s Your Contingency Plan?

KRISHNAN IYENGAR

VICE PRESIDENT, GLOBAL SOLUTIONS, REVAL

JEFF WALLACE

MANAGING PARTNER, GREENWICH TREASURY ADVISORS

Moderated by:

JAY MCGLYNN

SENIOR VICE PRESIDENT, REVAL



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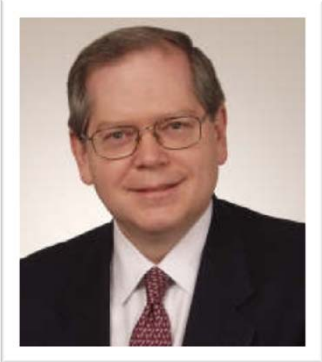
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About the Speakers



Krishnan Iyengar

Vice President, Global Solutions, Reval



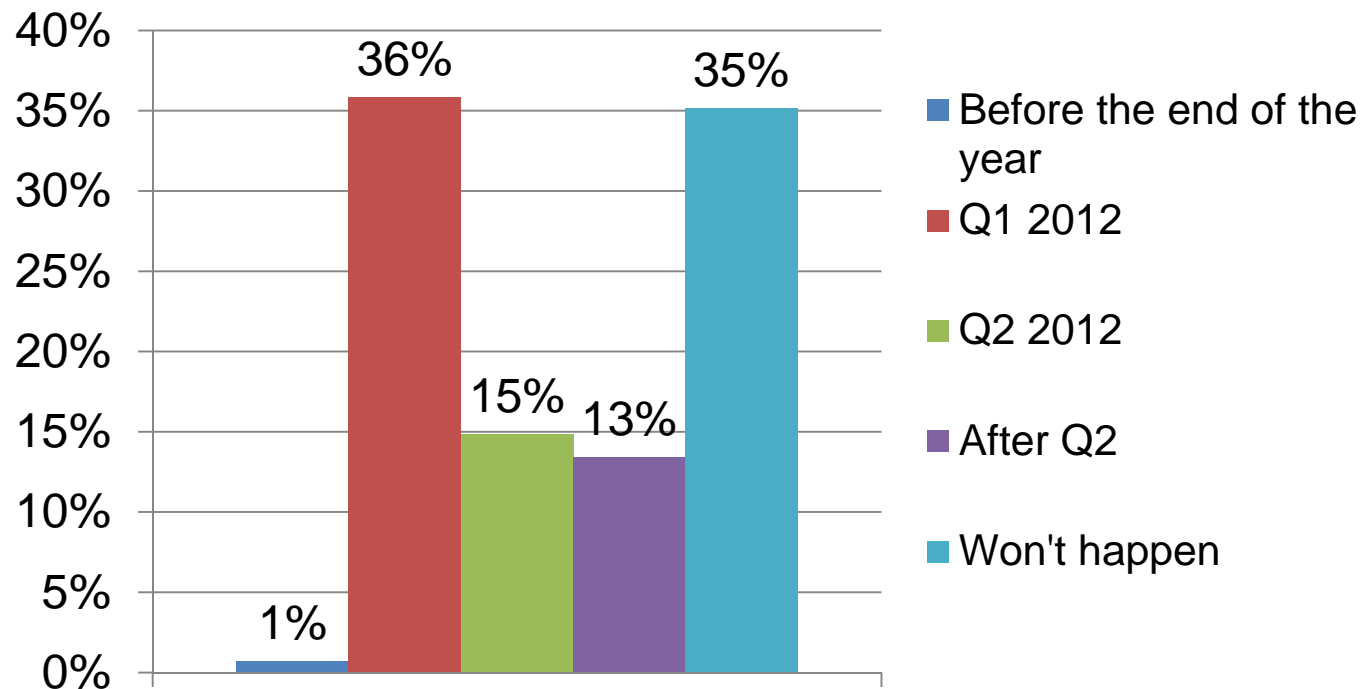
Jeff Wallace

Managing Partner, Greenwich Treasury Advisors



Polling Question #1 Results

When do you think the euro-crisis will have a major euro crisis event, such as a country leaving the euro, an EU sovereign debt default or a major European bank failure?



Agenda

- Executive summary
- Redenomination risk
- Accounting risk
- Liquidity risk
- Other recommendations
- Counterparty risk
- Technology risk
- About Reval
- About Greenwich Treasury



Executive Summary

- It's 2008 all over again: after Bear Stearns and before Lehman, but this time really is different:
 - We don't have a European government, a European lender of last resort, a common fiscal policy, or common social welfare laws
- The risks in Europe – sovereign debt, euro breakup, bank risk, and rising interest rates – are interrelated, increasing, and reinforcing each other
 - The only feasible solution is changing the ECB charter to fund sovereign debt, and even that probably would not stop an Italian debt crisis
- We are driving fast in a snow storm with a multi-car wreck happening just in front of us, having just passed these crashed cars, half off the road:
 - The collapse of Dexia
 - The collapse of MF Global
 - American money market funds no longer investing in European banks
 - European banks running out of collateral to borrow from the ECB



Executive Summary (cont'd)

- Corporate treasurers need to take action now to minimize their collateral damage in what is the end game for the euro
 - Unfortunately, few can do what Siemens did in September, which was to deposit EUR 6 bn with the ECB, as reported by FT on 9/20/11
- This presentation lists a series of recommended actions for five immediate risks: redenomination, accounting, liquidity, counterparty, and technology
 - They represent a good, but incomplete, starting point for thinking about what should be done
- Many of these recommendations lie within a treasurer's own authority and are easily done
 - Others require a hard decision regarding the risks and costs involved
- Smart treasurers will realize that their best course of action is to raise many of these issues with the CFO and jointly evaluate the risk/cost trade-offs



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Redenomination Terminology

- A breakup country is a Eurozone country that decides to break away from the euro and reverts to its legacy currency (“redenomination”)
 - As described in a later slide, it makes no sense to revert without defaulting on the debt and/or redenominating the debt into the legacy currency, so a euro breakup is synonymous with sovereign default
 - Of course, one can have a sovereign default without a breakup
 - Breakup risk countries most often mentioned are the PIIGS and Belgium
- Local refers to local entities within a breakup country or a country that has breakup risk
- Non-local refers to entities in countries that are not breakup risk countries
 - Since any euro breakup and the resulting sovereign debt default will put immense pressure on the remaining Eurozone countries, conservatively, all Eurozone countries are at risk
 - A euro breakup increases European (and global) bank counterparty risk due to their sovereign debt investments, and for that reason, all European banks have to be considered questionable counterparties
- “Hard euro” refers to the post-breakup euro of the remaining Eurozone countries



Breaking Up is Easy to Do

A country reverting to its legacy currency would take following actions:

- First, it would likely be done with the consent of Germany and France with the understanding that the country would remain in the EU in the non-Eurozone, despite the Maastricht Treaty's no exit mechanism
 - Half of the EU are non-Eurozone countries
- Then, like the Latins did in the 1970-90's when they established by fiat a new currency, the government will declare *force majeure* and redenominate **all in-country EUR – and maybe any currency** – monetary assets and liabilities into the legacy currency at some conversion rate
 - *Offshore euros with non-local banks would probably remain as euros, provided the country does not require repatriation of offshore funds*
- All sovereign debt would be also redenominated into the legacy currency because not doing it would defeat the whole purpose of redenomination, which is to devalue the sovereign debt to make it easier to pay
 - *Under IFRS, a redenomination would force all European banks to revalue their holdings of that sovereign debt, so whether it is a legally a default or not, it has the same impact of a sovereign default on European bank counterparty risk*



Breaking Up is Easy to Do (cont'd)

- For similar reasons, to avoid crippling the in-country private sector with euro debt, contracts with in-country residents (i.e., the contracts that require local enforcement) would also be redenominated into the legacy currency, including all EUR FX contracts written by local banks
 - While *force majeure* would not be effective outside of the country, contract enforcement would be long and problematic
- Implementation would include shutting down the local banking system for x days to allow the banks to change their systems and prevent local bank withdrawals or FX trades into other currencies
- Capital controls are also likely, which may lead to black markets
- Of course, as soon as it can be traded, the legacy currency will immediately devalue against the hard euro
- Some believe that the hard euro would revalue against the dollar, and possibly in the intermediate term it would, but the immediate European economic chaos, French bank risk, and the decline of German exports to the breakup countries argues otherwise



Restructure External Banking Transactions

- Make sure that all of your external and interco transactions are long euros with non-local banks and short euros with local banks in the likely breakup countries
 - If you are long euros with local banks, the risk is that the euros will be converted to legacy currencies at a significant loss
 - If you are long euros with non-local banks, with in-house banks in non-local countries, and cross-border euro cash pools with accounts with non-local banks, your euros will most likely be safe, provided there is not non-local bank counterparty risk (out the frying pan into the fire)
- Create long euro transactions with non-local banks by:
 - Non-local collection accounts for all currencies for all breakup country unit collections: now is the time to set up an EU collections center
 - Investing excess EUR cash with non-local banks or German governments
 - Or better, swapping EUR cash into dollars covered with a forward
 - Forward FX trades buying euros
- Create short euro transactions with local banks are:
 - Borrowing euros from local banks
 - Selling forward euros to local banks, buying other currencies



Restructure Interco Transactions

- Interco loans and interco derivatives are also at risk, and the same general rule of being long euros outside the breakup countries and short legacy currencies in the breakup countries apply
- So, the following kinds of transactions need to be restructured:
 - Euros lent by an in-house bank to a unit in a breakup risk country is economically short euros and long legacy currency
 - Interco derivatives with a unit in a breakup country in which the unit is selling euros, buying whatever
 - Try to replace these arrangements by substituting a local bank, which may be easier said than done



Short the Euro in Breakup Risk Countries

- A no-brainer protective measure is to short the euro with local banks for breakup risk units up to book net investment and designate them as net investment hedges
 - As local banks, the FX trade may be also protecting subsequent legacy currency net investment risk depending upon how things work out, but local banks have the largest counterparty risk, so perhaps non-local banks would be better
- To the greatest extent possible, all local unit borrowings should be done with local banks, refinancing interco loans and ex-country funding
- If interco loans cannot be refinanced, evaluate whether it is most tax advantageous to have the potential FX loss due to redenomination deductible at the borrower or lender by changing now the loan's denomination
- Minimize local cash/maximize local debt through appropriate leading and lagging of the interco trade account, by remitting dividends, and lending euros to in-house banks
 - Breaking APB 23 with dividends and establishing disregarded entities may not be the end of the world if subsequent local losses can be deducted in the US
- At the local unit level, consider hedging or increasing hedging of future non-EUR expenses with local banks, with the expectation of paying in legacy currency, taking into account the greater local bank counterparty risk



Short the Euro in General

- With the view that any euro breakup will also result in hard euro weakness against the dollar:
 - Increase HQ FAS 133 hedging, both as to maturity and amount such as interco royalties, of EUR revenue streams, such as interco royalties, and USD charge outs of overhead expenses to Euroland subsidiaries
 - Since the FX policies of most MNCs prohibit speculating in currencies, secure now permission in the case of a euro-crisis (as you so define) to immediately execute naked euro shorts up to some defined amount
 - Similarly, consider **reducing existing** FAS 133/IAS 39 hedges selling dollars/other currencies and buying euros
- To be discussed later in the counterparty section, implementing many of these recommendations requires careful consideration of bank counterparty credit risk
 - Develop FX credit lines with non-European banks because post crisis, European banks may not be willing or able to deal, so get those ISDA agreements signed now
 - Join the CLS Bank to eliminate FX settlement risk



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Existing Hedging Relationships Risks - 1

- Counterparty risk must be considered and appropriately reflected in all instruments measured at fair value [US/IFRS]
- Companies claiming critical terms match or shortcut must be very careful, as a significant counterparty downgrade requires calculating ineffectiveness and would almost certainly break the hedging relationship [US]
- A redenomination of both the hedge instrument and the exposure may not break the hedging relationship, but it might be difficult to convince the auditors [US/IFRS]
- A euro forward net investment hedge of a local unit whose currency is redenominated will probably generate ineffectiveness [US/IFRS]



Existing Hedging Relationships Risks - 2

- However, a redenomination of one side and not the other will cause:
 - Critical terms and shortcut hedging relationships to fail [US]
 - For other hedges using effectiveness tests, redenomination of one side and not the other will likely cause ineffectiveness, and possibly fail the effectiveness testing and break the hedging relationship [US/IFRS]
 - If for cash flow hedges the redenominated side is forecast FX or interest rate risk, then the forecast may be no longer probable, generating forecast error [US/IFRS]
- In general, the economic upheaval after a euro breakup may make *any* cash flow hedged forecast no longer probable, generating forecast error [US/IFRS]



New Hedging Relationships Risks - 1

Regression analysis is not likely to be appropriate for FX or interest rate swap hedges involving new legacy currencies because there is no prior history going back 36 months that regression analysis typically uses, so dollar-offset would have to be used prospectively (with stress testing) and retrospectively [US/IFRS]

- Alternatively, 30 days of history rather than 36 months might work
- Some may argue that prior legacy currency or yield curve history could be simulated using the euro and a fixed euro/legacy currency exchange rate, but since there would not be a fixed euro/legacy currency exchange rate post-breakup, to assume that it was fixed in the past so that regression analysis could be used is difficult to justify to auditors



New Hedging Relationships Risks - 2

- To minimize redenomination risk on new hedging relationships, consider documenting any hedged non-functional currency exposures into the “functional currency of the unit, currently EUR but any subsequent new national currency” with corresponding changes in the descriptions of the effectiveness test [US/IFRS]
 - Could use this formulation for dedesignating and redesignating existing hedging relationships to minimize redenomination risk on existing hedges
 - May not work, but something is better than nothing
- The overall issue is how strictly auditors will view the hedge documentation language
 - IFRS is more principles based and may be more relaxed
 - US is more strictly documentation language focused



Investment Accounting Risk/G/L Risk

- Companies holding held-to-maturity investments may need to consider whether the investments have been permanently impaired due to redenomination or increased counterparty risk
 - A key issue is whether the investments are under English law or local country laws
 - If English law, the write-down might be less since the bonds might still retain their euro denomination
- For units with new legacy currencies, there are some substantial G/L issues in creating a new set of books
 - At what rate would the euro books be converted to legacy?
 - What B/S accounts would remain euro denominated – and will now generate B/S FX G/L reported in P&L?
 - Will new currency codes be available?



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Liquidity Risk

- The techniques of managing liquidity risk are well-known and only a few of the more common ones are listed here:
 - Borrowing from banks and other lenders to warehouse cash, but must be careful where you invest it
 - Stretching out bank loan maturities
 - Refinancing bank loans with long-term debt
 - Reducing investment maturities
 - Investing in only the most liquid, safest investments
 - Delaying vendor payments, which has its own set of risks, especially for those that practice JIT inventory and supply chain management efficiencies
- In the event of a redenomination, local bank holidays, and local bank failures, how will you meet payroll?
- Of course, liquidity risk and the aftershocks of a euro breakup is also a concern outside Europe as well as within Europe
 - The impact outside Europe is a really good question; the only good news is that a euro breakup will not be a shock, while Lehman was an unexpected shock to the system



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Other Recommendations

- Latin American maxis invariably occurred over the weekend, often on Sunday night, so establish weekend communication links between European Finance and HQ Treasury personnel
 - Test all cell phone numbers to be sure that you have the European city codes reflected correctly!
- Read the Financial Times daily, because its European coverage and its editorial columns with its guest columns by major economists and European leaders is far, far superior to the coverage provided by the NY Times and the WSJ
 - Only the FT reported Siemens' EUR 6 bn deposit with the ECB
- The importance of choosing your banks carefully, and subsequently monitoring their credit risk and then taking appropriate actions cannot be stressed too much
- Having said that, the biggest counterparty risk is likely your commercial credit risk: post-breakup will your breakup customers have the ability to pay you due to the resulting economic chaos and sharply devalued legacy currencies?

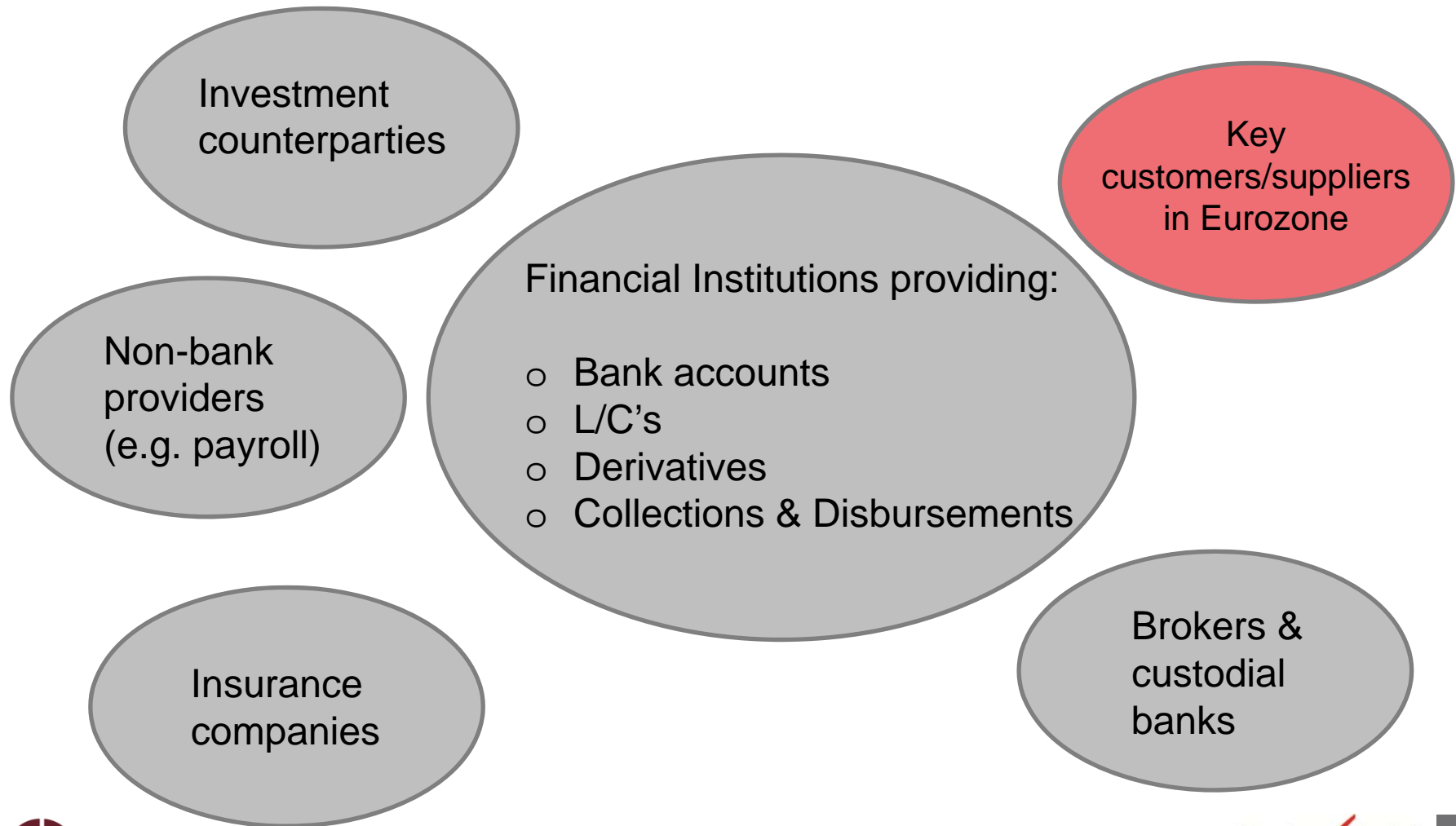


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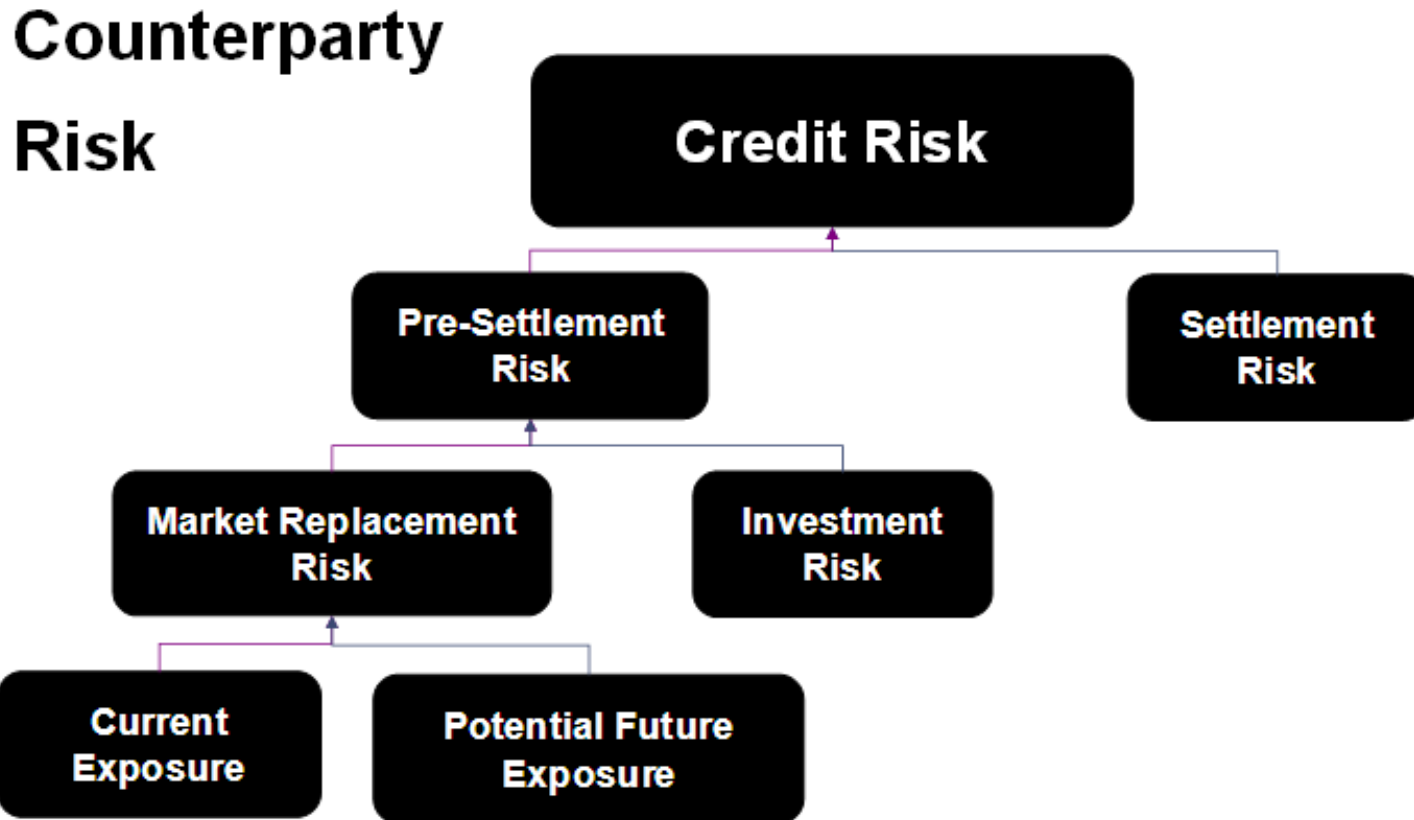
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Who are you exposed to?

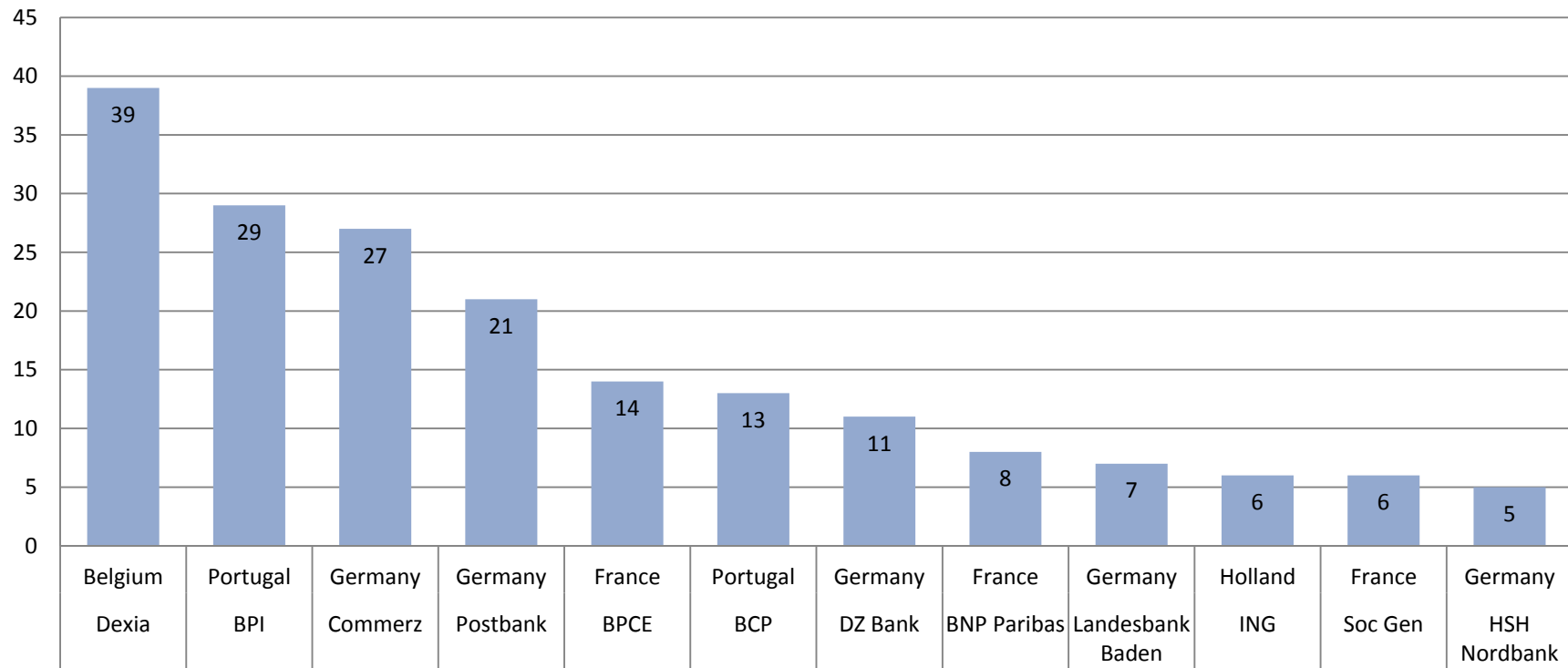


Key items to consider



Who's exposed outside of Greece?

Greek exposure as a % of Equity



* Source The Guardian



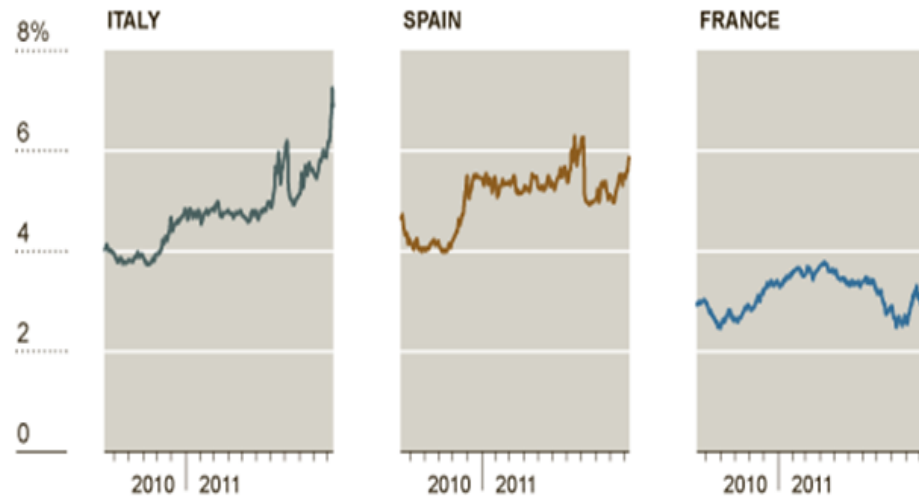
Pay close attention to...

- EUR sovereign investments

AND

- CDS written on European sovereign debt

10-year government bond yield
Daily



Credit default swap price
Annual cost of protection on a \$10 million bond
Daily, in thousands of dollars



Preventative suggestions

- Use leading as well as lagging indicators

Lagging indicators

- Agency guidelines
 - Use at least 3 agencies
- Don't allow split ratings if one agency's ratings is below your minimum

Leading indicators

- Average CDS spreads of counterparties (5 day-15 day moving average)
- Decline in market value of equity
- Movements in publicly traded debt



Preventative suggestions

Develop counterparty specific plans and triggers to:

- Sell investments regardless of market price
- Closing out gains on derivatives
- Consider cash flow impacts of selling at gain/loss

Consider counterparty diversification

- Canadian banks seem particularly attractive with tight capital controls and strong regulatory oversight



Preventative suggestions – commercial counterparties

- Reduce commercial credit lines to PIIGS customers
 - Insert clauses in client contracts to **receive** payments in **EUR**
- Insert clauses in supplier contracts to **make** payments in **local currency**
- Aggressively collect overdue balances ASAP
- Convert from on-account collections to Letters of Credit with non-local banks



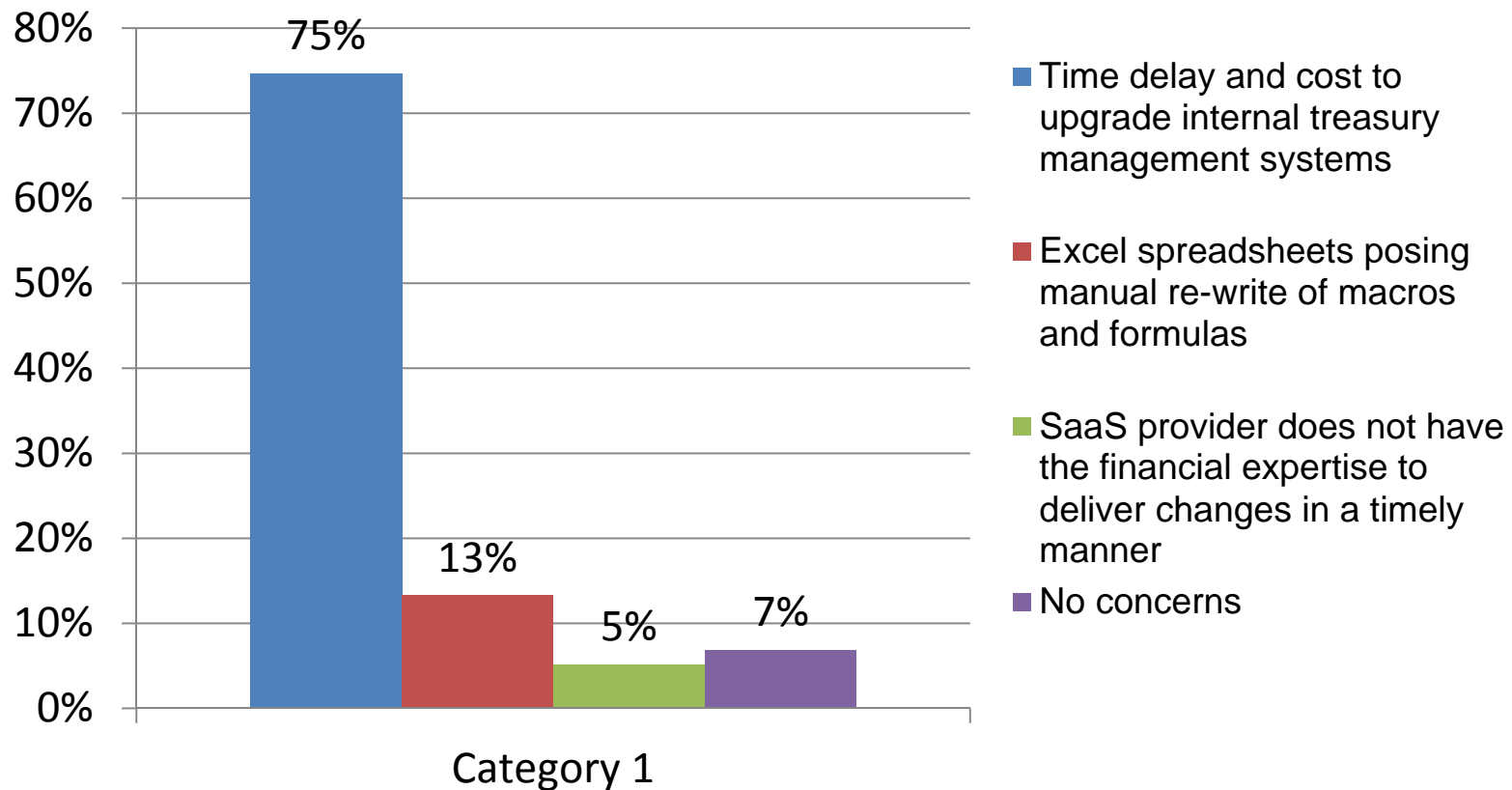
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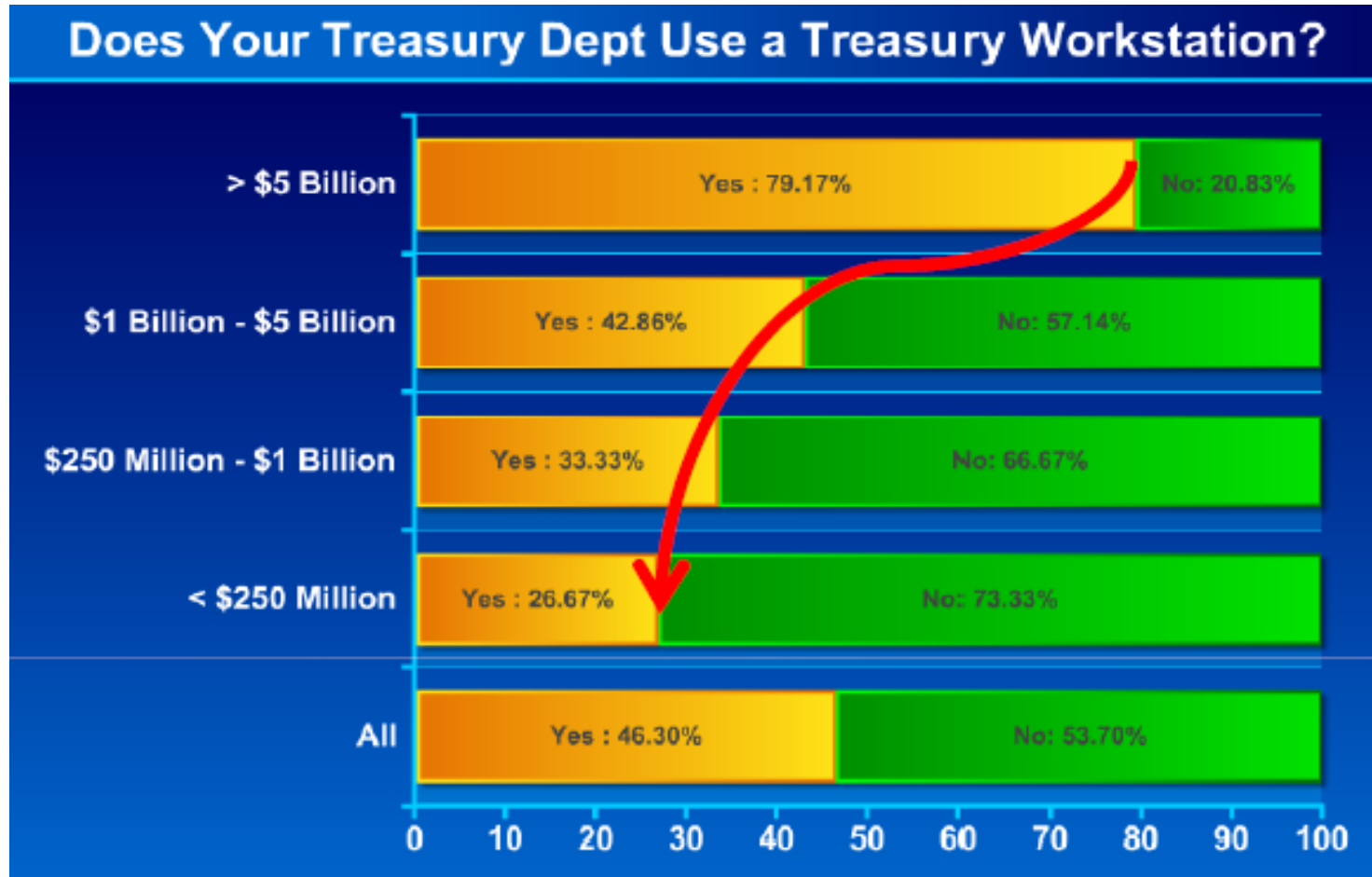


Polling Question #2 Results

Which technology related risk most concerns you:



What systems are companies using?



* Source TreaSolution Survey

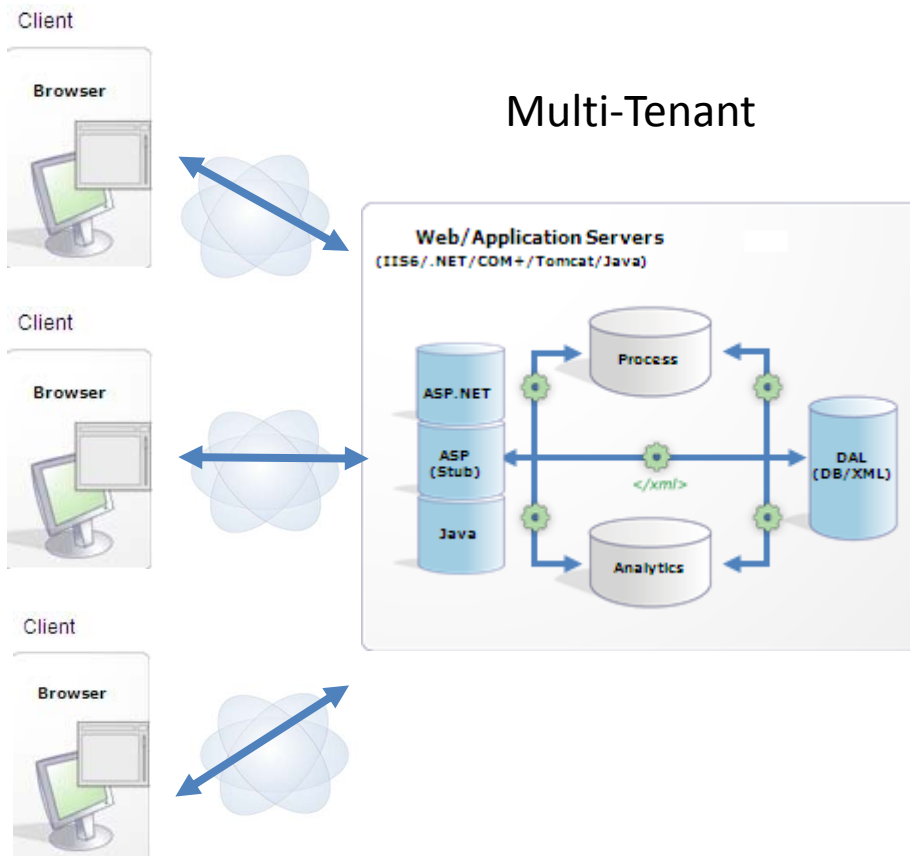


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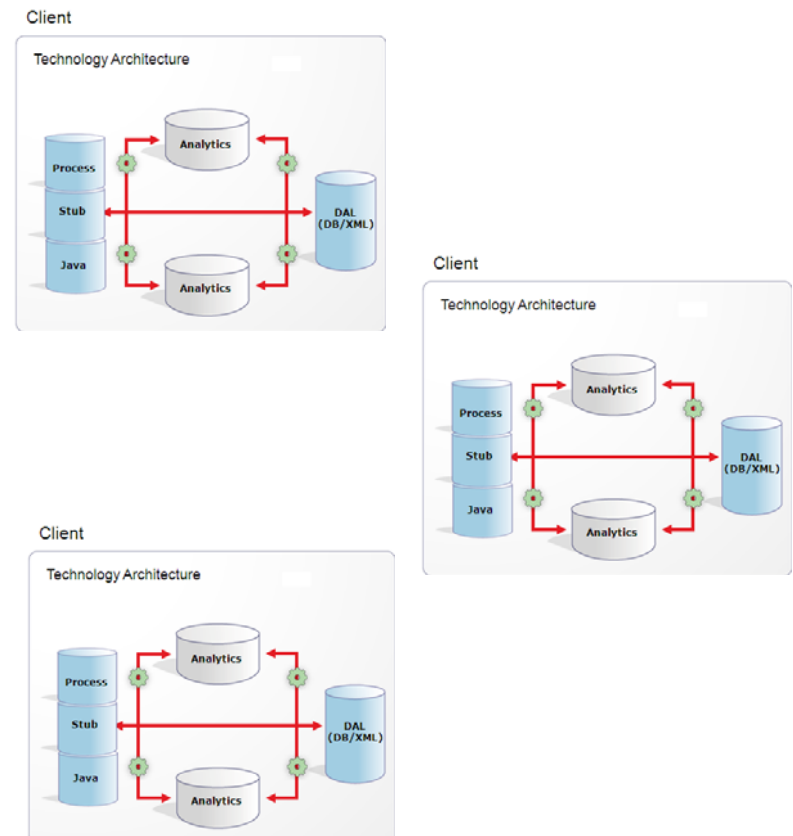
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SaaS vs. Installed

One change to code base



House to House fixes



Technology Considerations

- Existing treasury systems ill-equipped to handle sudden changes
 - Technology as well as financial analytics issue
- Most recent example of disruption to systems
 - UK Holiday calendar for royal wedding
- Preparation is key



Changes companies should be considering

Data Driven

- ISO Codes
- Holiday calendars
- Data sourcing from various vendors

Analytics Driven

- Valuation considerations
- Historical rates
 - Yield curve bootstrapping
 - Business logic for hedge accounting



Questions to ask treasury technology vendors

SaaS

- How frequent are your upgrades?
- Should Greece redenominate, how long would it take to capture and value GRD contracts?
- Have you started stress testing existing systems to determine possible issues?
- Will your system support long-haul for hedge accounting if Critical Terms Match and Short-cut are disallowed?



Questions to ask treasury technology vendors

Installed

- How long do you estimate it will take to get the “patch” for supporting the GRD on our version of the system?
- Are there ways to use other currency codes as a proxy to the GRD in the interim?
- Will we be forced to upgrade to the next version of the application due to this change?
- How do you plan on implementing changes at clients with older versions?



About Reval

Reval is a global provider of an all-in-one Software-as-a-Service solution for enterprise treasury and risk management. Its award-winning SaaS delivers deep and broad visibility into cash, liquidity and risk for finance, treasury and accounting groups, worldwide. With Reval's integrated, straight-through processing workflow of front-to-back office functions, companies can optimize operational efficiency, security, control and compliance across the enterprise. Reval's unique combination of deep domain expertise and comprehensive functionality provides companies with the means to compete confidently in a complex and dynamic market environment. Founded in 1999, Reval is headquartered in New York with regional centers across North America, EMEA and Asia Pacific.

For more information, please contact:

Krishnan Iyengar | krishnan.iyengar@reval.com | (212) 901-9808

Jay McGlynn | jay.mcglynn@reval.com | (212) 901-9850



About Greenwich Treasury Advisors

In our 20th year, Greenwich Treasury Advisors has consulted with over 450 CFOs and Treasurers on these treasury challenges:

- Reducing FX, interest rate, and commodity risk with policies and hedging practices on an effective US GAAP and IFRS basis
- Developing funding strategies, negotiating debt agreements, preparing credit rating agency presentations, and managing debt compliance
- Improving group and foreign unit treasury operating efficiencies and minimizing operational errors



Greenwich Client List

Our client list exceeds 450 companies and ranges from Fortune Global 10 multinationals to private middle market companies, from Europe to North America to Asia/Pacific:

Alcan	General Motors	International Paper	Nestlé
Amgen	Fiat	Johnson Controls	P&G
Applera	Freescale	Lucent	PepsiCo
Barrick Gold	Hercules	Merck & Co.	Philips
BP	Hewlett-Packard	Monsanto	Siemens
Dow Chemical	Hexcel	Movado	Toyota
Du Pont	Hydro-Quebec	NZ Dairy Board	TRW Automotive
Ford	IBM	Novartis	Unisys



About Jeff Wallace

- Founded GTA in 1992, and author of:
 - *The Group of 31 Report: Core Principles for Managing MNC FX Risk* (Association for Finance Professionals, 1999)
 - FAS 133 chapter of *The Handbook of International Finance & Accounting* (2004, John Wiley)
- Co-Founded Debt Compliance Services, a unique web-based debt compliance service, www.debtcompliance.com, in 2009, and co-founded *International Treasurer* in 1994
- Formerly VP-International Treasury at American Express; Assistant Treasurer – International at Seagram; Assistant Treasurer – Finance & Operations, at D&B; and a CPA at Price Waterhouse
- +1-303-442-4433, jeff.wallace@greenwichtreasury.com and jeff.wallace@debtcompliance.com

