

## Operational Planning for a Euro Crisis

BY SCOTT WYBRANSKI, CFA

Investment companies rely on operations teams to support all business activities, from sales and trading to performance reporting. Accordingly, firms are becoming increasingly wary of the operational impact that a potential eurozone breakup may pose. To assess and mitigate the impact properly, firms need to examine the possible euro scenarios, understand common assumptions, review practical issues, and implement solutions.

The rapid deterioration of the economic and political climate in EU countries has left the investment community questioning the fate of the euro. Exacerbating things, participant countries have been unable to agree on the proper way to preserve the EU. Together, these issues have produced a dramatic increase in the odds of possible exits or, even worse, a complete breakup of the EU. Recognizing the implications of a euro breakup, many U.S. investment firms are preparing contingency plans. Without certainty about the future state of the euro, however, key planning questions about the scope of an event and its timing remain unanswered. Without an imminent threat and facing constrained budgets, many investment firms have taken only cursory, disjointed steps.

### Possible Euro Scenarios (Planned or Unplanned)

Four possible outcomes shape the conversation. First, if austerity measures and bailouts are strong enough to sustain the union in its current form, then the EU may be preserved. Stronger countries also have incentive to bail out weaker countries. Germany's bailout offer to Greece has an estimated cost of US\$1,000 per capita, but this pales in comparison with the US\$7,000–US\$8,000 estimated cost per capita of a Greek default.

A second outcome is one or more of the weaker PIIGS (Portugal, Ireland, Italy, Greece, and Spain) countries exiting the union. Some observers expected Greece to exit the EU on or before 20 March, the due date for US\$18 billion the country owed on its sovereign bonds. While the bailout package offered to Greece temporarily delayed Greece's exit from the EU, there are no assurances that it won't follow through in the future. Moreover, a growing chorus believes that, despite the short-term cost, stronger countries should allow weaker countries to fail, thereby ensuring that the remaining countries stay the course.

In a third scenario, one or more of the stronger countries exit the EU for nationalistic or fiscal reasons. French elections are scheduled to occur on 22 April 2012 and political factions with strong isolationist platforms are driving the national discourse. Similarly, the political and economic discussion in Germany leans heavily against the

country providing any future bailouts. Despite its enormous influence within the EU and bailout actions to preserve the union, Germany has reinstated its Special Financial Market Stabilization Funds (SoFFin)—a sign that the country could be preparing for the possibility of an exit from the EU. The SoFFin funds would be used to bail out German banks in the event of a euro breakup.

The fourth possible (and perhaps least likely) outcome is the complete breakup or dissolution of the EU. While this is viewed as a remote scenario, it bears noting that, prior to the EU's official formation in 1993, many predicted this outcome. Supporting this perspective is the belief that without a political force to unify member countries to create and enforce consistent fiscal policies, nationalistic policies will drive decisions and behavior that may run counter to EU interests.

My company has participated in conversations with investment firms regarding potential EU scenarios and the likely operational impacts. Firms that are preparing contingency plans see a stronger likelihood for the first or second scenario. Still, as all four outcomes bear distinct possibilities, contingency planning should anticipate and prepare for any scenario. A planned, orderly event announced in advance is a best-case situation. Conversely, an unexpected, unplanned, and disorderly event will likely cause significant financial market disruptions.

### What We're Hearing on the Street

Most observers believe a major euro event will occur within the next 12 months, possibly Greece or another PIIGS country defaulting or exiting the EU. A coordinated and structured exit, whether voluntary or forced, should provide a support level for the bond values of the remaining PIIGS countries. Even so, worry persists that a country leaving the euro will put its own self-interests ahead of the welfare of other countries and also the financial stability of global markets.

Also widely held is the notion that if one country leaves the euro in the next 12 months, others will follow within the next several years. The working hypothesis is that one of the PIIGS will exit the EU following the departure of another country. Italy, as Europe's third largest economy, is commonly viewed as too big to fail. I challenge these assumptions. Is Italy too big to fail or simply perceived as such? Most believed that Lehman was too big to fail, which begs the question: Have the markets learned from such assumptions? Stronger countries, fueled by nationalistic and isolationist movements, may leave the EU as they continue to grow weary of taxpayer dollars funding bailouts of other, weaker countries.

Finally, a common belief is that the breakup of the eurozone is inevitable without member countries adopting a ▶▶

shared fiscal policy. Such a policy change will require a significant modification to the political structure of the EU.

Given the impact that any of the possible eurozone scenarios may produce, coordinated contingency planning efforts are a worthwhile investment. Curiously though, the industry's planning efforts are inconsistent, disjointed, and random and don't clearly acknowledge the exigent nature of the situation. Regulatory agencies and industry vendors will play a key role with respect to implementing euro-related changes but have said little about their own plans concerning such an event.

### Underlying Assumptions and Related Problems

To begin thinking about contingency plans, careful attention needs to be given to four areas: corporate transactions, implications of new currencies and legacy currencies, redenomination of securities, and the prospect of announcement after the close of U.S. markets.

**Corporate Transactions.** We at Meradia agree with the general industry consensus that rapidly posting a large series of corporate actions to close out old euro-denominated positions can quickly and efficiently reclassify securities in their new denominations. Our firm encourages industry participants to recognize the inherent problems. Standard corporate actions are clear with respect to process. The impact, consequences, and data stemming from major political or social crises are not. Therefore, utilizing corporate actions to process transactions stemming from a euro event will unlikely be straightforward. Processing a complete series of corporate actions to redenominate euro holdings depends on timely, consistent, accurate, and unambiguous valuation and FX data. Without this critical information, a massive market disruption will occur, likely causing local and global markets to close temporarily.

**New and Legacy Currencies.** If a country elected or was forced to exit the euro, the working assumption is that a new currency will be created, as opposed to reusing the country's former currency. For example, if Greece exited the euro, its currency might become the new "drachma" and carry a new ISO (International Organization for Standardization) code. Creating a new currency prompts an important question: Should historical euro prices be converted into the new currency?

**Redenomination of Securities.** I agree with the view that markets will simply change the currency on existing securities, reference data vendors will report using the currency, and that industry participants will use this data to post automated corporate actions, but I believe that this view oversimplifies the situation. Fixed-income transactions pose the biggest challenge, and a euro event is unlikely to change the currency of all of a country's debt obligations. When the euro was formed, short-duration securities kept their existing denomination, whereas long-term securities were redenominated to the euro. I look to the past for guidance concerning a future euro event, and our firm expects a similar outcome for short- and long-term securities if a

euro event unfolds. This scenario will add complexity to the process of automatically creating and posting corporate-action transactions.

**Post-Close Announcement.** The investment industry expects that any euro event will be announced after the U.S. markets close on a Friday afternoon prior to a holiday weekend. Since Pacific Rim markets open Sunday morning (EST), this will provide a significant opportunity for industry participants to absorb the news and prepare for market openings. Given the operational impacts, an orderly, planned event is to be hoped for. If an event is announced—or worse, leaked—while markets are open, business activity will be impaired. Should a country default, elect to leave, or be forced out of the euro, the stability of markets will likely be questioned. Even in this widely anticipated scenario, the industry will have at most 72 hours to prepare for the next market opening. To successfully meet a euro event, firms must prepare in advance—and have completely tested their systems and processes by and/or supporting the conversion.

### Practical Issues

Firms must anticipate and coordinate practical issues prior to a euro event. To reduce risk, firms must apply careful, methodical, and meticulous planning and preparation. System modifications must be identified and implemented and business continuity plans updated to reflect the impact of a euro event. Multi-scenario (not single scenario) testing must then be completed. Testing will assess system readiness, and if all systems can handle the conversion to new currencies and ISO codes, then the firm can reasonably assume that an actual conversion will be successful.

If a euro event occurs after testing and preparations have been completed, firms should follow "business as usual" protocol. Assessing resource operability will allow the firm to evaluate exposures and its ability to trade and provide accurate valuations. I expect that the final steps in successfully navigating a euro event will include communications to clients, management, and the Street. These messages will include portfolio impacts, risks, IMA breaches, and asset, performance, and attribution reporting.

Trying to predict how a significant and complex disruption like a euro breakup will impact global markets is exceedingly difficult. Following an event and an internal assessment, firms must consider their interdependencies on other market participants. According to industry estimates, 12 firms and/or services touch any given transaction during its life cycle from trade placement to settlement. As such, firms must assess the euro event readiness of each partner in this life cycle, as unprepared firms will cause the process to fail.

Firms must assess risk and ensure liquidity by examining their assets and liabilities and by evaluating and defining how to work with subcustodians to trade securities that may be denominated in new and "non-deliverable" currencies. Other considerations include assessing

counterparty risk, settlement issues, in-flight trades, pending dividends, collateral agreements, and open borrowing.

The bottom line is simple: The industry wants to move money, move assets, and settle trades. In preparing for a potential euro event, firms need to clarify three main considerations: (1) how they will accomplish these bottom-line activities, (2) upon whom they will rely for the necessary services, and (3) the full-functional preparedness of their partners. Moreover, the market will need to confirm the availability and quality of third-party data, which is a critical factor in a firm's ability to do business with others.

In summary, these factors can be distilled into one overarching concern: liquidity. The presumption of liquidity drives markets and fosters market stability. If systems are inoperable and accurate valuation and exchange rate data are lacking (thus impacting liquidity), then a euro event will pose a significant threat to liquidity, thereby wreaking havoc on the markets.

### Recommendations

To help the industry prepare for and mitigate the risk of a euro event, I offer recommendations for three segments of the investment industry: the U.S. SEC and other regulators, industry vendors, and industry participants.

**SEC and Regulators.** Uncertainty equals risk. Greater certainty means less risk; less certainty means more risk. In our view, the Street only wants regulators involved because they have a unique capacity to reduce uncertainty in the market. Discussions with clients and industry participants tell us that the industry is looking to the SEC to provide general guidance on preparations and the rules of engagement, as it did for other planned events like Y2K. In doing so, the SEC should also articulate its planned response in the U.S. for several key contingencies:

- freezing "40 Act" fund subscriptions/redemptions temporarily in the absence of fair pricing,
- implementing cooling-off periods (temporary closures of U.S. markets),
- resolving restructuring-influenced temporary breaches to IMA agreements,
- handling in-flight and as-of trades,
- issuing a statement regarding flexible fair-valuation policies that would allow firms (in the absence of independent sources) to create fair values, and
- providing flexibility for striking net asset values within standard timeframes.

Regulators face a vexing dilemma. Pressure is mounting from the industry to act, as the SEC's mandate is to protect investors and maintain fair, orderly, and efficient markets. By taking a public position about preparing for a euro event, however, the SEC could undermine preservation efforts, which may increase the likelihood that an event will occur.

**Industry Vendors.** Industry vendors should enhance communication and collaboration with clients to instill confidence that the industry can react quickly and efficiently to any euro event. Software and service providers should update their systems and platforms, test these updates in multiple scenarios, and then communicate the updates to clients. Still, there are operational impacts that cannot be anticipated, addressed, or tested in advance because they depend on how a euro event unfolds. Informing clients of both resolved and pending issues will help clients with their own planning.

Many of Meradia's clients have begun preparing for a euro event but have received only vague assurances from market data vendors about their preparations and approach. Given the questions that have arisen as a result, our recommendation is that market data vendors provide clients with a clearly defined and articulated plan that describes how data will be adjusted to reflect multiple euro scenarios.

ISO/TC68 (technical committee 68) should provide guidance on the speed with which new ISO codes will be created. Transaction messaging using the SWIFT network depends on ISO codes. New ISO codes are typically released two weeks after a request is submitted. Clear guidance from ISO/TC68 will simplify the industry's preparations and, if necessary, help it devise plans for communicating transactions before the release of new codes.

**Industry Firms.** European firms recognize the risk of a euro event and are far more prepared than their U.S. counterparts. The current interdependencies of global markets dictate that U.S. firms adopt a similar readiness. My message is "Get ready now."

Industry firms, their peers, and vendors should participate together to develop a unified approach to prepare for a potential euro event. Firms, counterparties, and vendors need to collaborate to ensure that all have confidence in each other's preparations and that all can function following any euro event. This will provide assurance that trading is unimpeded, valuations are fair, money and assets can move and settle freely, software and data will function appropriately, and NAVs can be calculated and published. Joint, collaborative efforts will improve confidence that the industry is prepared for any contingency.

Market stability is critical to successfully managing a euro event. The lack of transparency and knowledge sharing by firms that are privately preparing creates anxiety. It also gives rise to one of two perceptions: (1) firms are positioning for a competitive advantage during a euro event or (2) firms aren't ready. Both will erode market stability. In the absence of regulatory directives to disclose contingency plans, the best approach is open and transparent collaboration.

The global and widespread impact of a euro event should compel firms to promote greater awareness of risks, potential solutions, and collaborative efforts to standardize the industry's response. Inconsistent planning efforts and allocation of resources will only aggravate an already uncertain situation. Firms must define risk and conduct tests **»»**

► of multiple scenarios to build operational confidence to manage a euro event.

Business continuity plans must be well defined and tested with internal and external participants to ensure readiness. Firms must recognize critical deficiencies in contingency plans, particularly where system and database functionality depends on one or two people. Such a shaky workflow must be acknowledged and resolved prior to an event unfolding, or the firm may face unknown and potentially disastrous risk. Policies governing process, most notably valuation, should be reviewed to ensure flexibility to meet any scenario resulting from a euro event.

In summary, these recommendations are presented to help firms within the investment management industry plan for and successfully navigate any potential euro event. By taking collective action now, the industry can instill confidence in its ability to mitigate operational impacts. I contend that the winning formula for a contingency play is communicate, collaborate, and get ready. ▀

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## Moral Hazard and the Eurozone Crisis

Can joint sovereign guarantees provide a satisfactory solution?

BY OSMAN GHANI, CFA

**T**he eurozone debt crisis has reached a critical point, with many market participants seriously questioning the EU's ability to prevent a contagion that spreads from Greece to larger EU member states, such as Italy, and the onset of a second global recession in the span of five years.

The EU member states have held numerous conferences in an effort to arrive at a common solution to the debt crises and to shore up both investor confidence in EU sovereign debt and concerns over the future of the euro. Leaders have discussed the possibility of implementing joint sovereign guarantees or a fiscal union as a means to reduce investor and capital market fears and to prevent the possibility of both a disorderly default by some EU member states and the collapse of the euro as a currency union.

Most EU members touted a joint sovereign guarantee scheme to tackle the growing EU debt crises, but German Chancellor Angela Merkel was reluctant to sign up to such a proposal, leading the EU to choose the fiscal union strategy instead. In this article, I use a "moral hazard" approach to discuss both proposals.

In a moral-hazard model, a principal-agent conflict occurs when the agent has more information about his or her actions than the principal does (as proposed by K.J. Arrow, "Uncertainty and the Welfare Economics of Medical Care." *The American Economic Review* [1963]). This issue arises from the principal's inability to effectively monitor the agent's actions, which in turn gives the agent an opportunity to act in a manner that would adversely affect the principal's interests.

To apply this model to the current euro debt crises, the principals are the euro debt-holders who have lent money to EU member states and the agents are the governments that have borrowed the money.

The moral-hazard problem arises in this situation because the debt-holder cannot determine *ex ante* whether the government will be in a position to repay the debt. For a

government debt-holder, the ability to be repaid promised coupons at face value depends not only on economic fundamentals but also on the government's ability to tax and repay the debt.

The problem for the debt-holder (principal) arises when he or she thinks that the relevant government either will not use the borrowed money properly or will be unable to generate enough revenue (collect tax) to meet the debt contract requirements (coupon payments and the repayment of face value).

Part of the problem may arise from poor economic conditions in the relevant country, but another part arises from a moral-hazard scenario with the borrowing government. The moral hazard occurs because the government has no incentive to undertake unpopular, but at times necessary, steps in order to ensure that the debt-holders receive their promised amounts.

One way a government can pay the promised amount is by having its economy grow over the maturity of the debt, generating a higher revenue stream for the government while holding tax rates constant. Failing that, if the economy is in a recession (as is currently the case for several EU member states), the government has three main options. First, it could cut back on spending, thus reducing its borrowing needs so it can pay back the promised amounts to debt-holders. Second, it could increase current tax rates and thereby attempt to generate sufficient tax receipts for revenue to pay back the debt. Or it could institute tighter fiscal control over the budget by both reducing discretionary government spending and cracking down on tax evasion.

The first two possible measures could in fact negatively affect a country's economy and its government's ability to repay the debt. In the first case, the government may reinforce a recession by cutting spending when spending is actually necessary to maintain or encourage economic growth. In the second case, the increased tax may lead to a "Tobin's Tax," whereby the net tax receipts collected under the increased tax rate might actually be lower than would be the case under the lower-tax regime. (See J. Tobin, "Proposal for Inter-