Quarterly Investment Perspective

Islands in a Storm

Rebecca Patterson, Chief Investment Officer

The first quarter of 2014 — unfortunately — met the expectation we articulated in our year-ahead *Investment Perspective* published back in December: This year, risk assets would appreciate further but against a backdrop of heightened volatility. During the quarter, global equities struggled to hold onto gains, while the CBOE Volatility Index briefly tested its highest level since 2012.

Two main factors generated the recent market waves: growth concerns in key emerging-market countries and unusual weather. Interestingly, shifting U.S. monetary policy was absent from the list of volatility drivers in the first quarter. In fact, U.S. 10-year yields inched lower, from 3% at the end of 2013 to around 2.7% at the end of March, despite a continued tapering of Federal Reserve asset purchases.

These last few months have continued an increasingly frequent pattern in recent years: market contagion resulting from what often might seem to be innocuous sources. Iceland, Ireland, Cyprus, and, most recently, Ukraine's Crimea are just a few examples of "islands in a storm" that triggered market reactions much broader and more painful than their geographic or economic sizes would suggest.

When does a small island's problem become everyone's problem? In this *Quarterly Investment Perspective*, we share how we analyze these sorts of islands (or peninsulas, in Crimea's case). To the degree we can determine the likelihood of contagion from what might be a small but troubled place to global financial markets, we can more effectively manage what is starting out as a volatile year. We believe that by successfully navigating volatility, in part by understanding contagion, we can achieve stronger performance in our clients' portfolios over time.

Understanding Contagion

Events erupting in July 1997 forever changed how investors think about the word "contagion." A currency crisis in Thailand that year quickly enveloped most of East Asia, and then spread further, as far as Japan, Russia, and even Brazil. Over time, financial markets in the U.S. and Europe were impacted to such an extent that a large U.S. hedge fund, Long-Term Capital Management, collapsed (Exhibit 1, page 2).

Today, instead of describing the spread of a medical disease, contagion is used more frequently in a financial context, to depict the transmission of financial or economic difficulties in one area of the world to others. Contagion has been studied extensively; volumes of academic work have been devoted to the subject. For the purposes of this *Quarterly Investment Perspective*, we will focus on what we consider a few critical aspects of contagion: what causes it, how it migrates around the world, and how we can determine when countries or regions are vulnerable.

Triggers

We see contagion as generally caused by two types of shocks. First, there is a common or global shock (sometimes called a "monsoonal effect"), which has similar implications across many countries. As we look at the year ahead, the biggest "monsoons" we lose sleep over are the U.S. Federal Reserve's

Exhibit 1: 1997-1998 Financial Crisis, A Textbook Example of Contagion

Year	Date	Event
1997	*July 2*	Thailand devalues baht, which falls 20%; Thai government requests IMF assistance
	Oct 27	Malaysian ringgit, Philippine peso, Indonesian rupiah, and Singapore dollar all weaken; a rattled Dow Jones Industrial Average falls 554 points; trading on U.S. stock markets suspended
	Oct 31	IMF agrees to $40 billion loan package for Indonesia in return for reform; IMF announces delay in $700 million quarterly loan to Russia because of country's lax tax collection
1998	*May 27*	Russian markets plummet; central bank triples interest rate to 150%
	Jun 17	Japan enters recession for first time in 23 years; U.S. intervenes to help support falling yen
	Aug 4	Amid worries China will devalue its currency, Hong Kong's dollar and equities weaken sharply
	Aug 17	Russia devalues ruble and announces moratorium on foreign debt repayment, leading to panic and dollar buying; Latin America markets sell off on fears of default and devaluation
	Aug 21	Russia defaults, sending a selling wave through stock and bond markets in Latin America, the U.S., and Europe; U.S. Treasury yields drop to record low
	Aug 31	Dow Jones Industrial Average falls 512 points, the second-largest point loss ever
	Sep 10	Dow loses another 249 points and Brazilian stocks fall another 16%; Mexican central bank attempts to buoy peso by selling $50 million
	Sep 11	IMF announces loans to Latin American countries; investors flee Brazil
	Sep 23	Long-Term Capital Management, one of largest U.S. hedge funds, receives $3.5 billion bailout
	Sep 29	Fed cuts interest rates by 0.25%, then again just weeks later; world equity markets rally

continuing monetary policy shift and China's growth slowdown. That first common shock, which has pushed U.S. interest rates and the dollar higher, has driven our decision to underweight traditional fixed income. The second shock, a China slowdown, has influenced our underweight positions in emerging-market equities and commodities. Over the last year, all three asset-allocation decisions have benefited our clients' portfolios.

The other type of shock is more idiosyncratic; a crisis in one specific part of the world spreads to others. Ukraine certainly fit this description in the first quarter. While having a relatively small economy (Ukraine's nominal GDP is roughly in line with New Zealand's or Romania's), it is strategically important, bordering the European Union (EU), Russia, and the Black Sea, and its pipelines take substantial Russian energy exports to key European countries such as Germany.

History suggests that common shocks are more salient than idiosyncratic ones. Indeed, one analysis by the San Francisco Federal Reserve found that, of 121 countries over the 1974-97 period, common shocks accounted for the vast majority of the crises any particular country experienced over time. That said, strengthening global linkages since the study was conducted in 2000 may have increased the impact of idiosyncratic shocks. The bottom line, in our view, is that we need to be looking out for both types of storm clouds.

Transmission Channels

What allows contagion to occur? How exactly does a crisis in one place spread to others? Here the analysis gets more complicated in that contagion can unfold in a few different ways and often with multiple transmission channels happening at once.

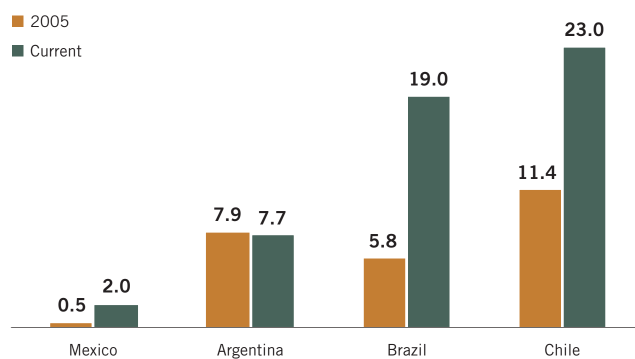
Trade. Perhaps the most frequent and impactful method of contagion is trade. Slower growth in one country may reduce demand. That in turn can weigh on other economies that depend on exports to the country in question.

China is a good, live example of trade-related contagion. As Chinese growth has moderated — from average real GDP growth of 11% between 2002 and

2007 to an estimated 7.7% last year — demand for commodity imports has slowed. Other countries that have increasingly focused their commodity export businesses on China have suffered. Latin America has been particularly hard hit. Chile, for example, has grown much more dependent on Chinese demand: From 2005 to 2012, its exports to China (chiefly copper) as a share of total exports more than doubled, from just over 11% to 23%. Meanwhile, Brazil's exports to China represented nearly 19% of the country's total exports by 2012, up from less than 6% in 2005. With less Chinese demand, these countries have lost much-needed trade revenues. That in turn has weighed on the countries' broader growth and current-account balances. With widening current-account deficits, Chile, Brazil, and some of their neighbors have become more vulnerable to sudden shifts in capital flows that can hurt their currencies (Exhibit 2).

Exhibit 2: Latin America Vulnerable to China Trade-Related Contagion

Exports to China (% of Total Exports)



As of December 31, 2013.
Source: J.P. Morgan

Financial links. Currency volatility, especially currency weakness, can exacerbate a related transmission channel for contagion — financial links. If a country in crisis is well integrated into the global financial system, its internal turmoil and currency problems can unnerve investors and lead to a decrease in banking activity, foreign direct investment, or other capital flows — all of which are critical to a country's financial health.

Let's take Indonesia as an example. Similar to countries in Latin America, Indonesia's trade ties with China have strengthened over the last decade, including commodity trade. Not surprisingly, then, a China slowdown has weighed on Indonesian growth and helped turn Indonesia's current-account surplus to a deficit starting in 2012. The weaker fundamental backdrop made investors from around the world nervous about Indonesian assets. As investors reduced their exposure to the country, capital flows leaving Indonesia weakened its currency, the rupiah. This process was behind the rupiah's 26% fall against the U.S. dollar just between 2012 and the end of 2013.

Investor sentiment. A third means of contagion is broad investor sentiment, often referred to as "risk appetite." Investors seeing a crisis unfold in one country, or watching trade or financial contagion start to build, may decide it is wiser to reduce risk in a portfolio generally, even if the portfolio is not immediately threatened by the crisis at hand. Such investor "risk on" and "risk off" behavior appears to have increased in recent decades as companies and economies have become more interconnected, and as investors have taken a more global approach to portfolio construction.

Risk aversion has proven to be more difficult to quantify than trade- or financial-contagion channels; it can also be challenging to discern whether risk aversion *creates* contagion or is a *result* of contagion. We believe it can be both. We also believe that investor sentiment often reverts to the mean in the short term. When investors worry about a crisis and reduce risk, that process is finite. At some point, prices of what were perceived as "risky" exposures are reduced enough that investors become comfortable again. At the same time, valuations of the markets in question tend to become more attractive during this risk-reduction process.

This January was a good example of shifting risk appetite and contagion. In addition to more signs of a slowing China during the month, investors had

to digest a number of negative events in emerging markets, including a devaluation of Argentina's peso, a corruption investigation in Turkey, rising tensions in Ukraine, and a state of emergency in Bangkok, Thailand. As a result, the first month of the year saw some $23 billion in outflows from emerging-market stocks and bonds. More surprising, though, was that nearly $12 billion left U.S. equities during the month, pulling the S&P 500 Index down nearly 4% over the same period.

By early February, investors were re-evaluating what had become more attractive valuations, alongside new information (such as a number of emerging-market central banks raising interest rates to stabilize local currencies). Over the course of February, investor sentiment bounced back, and capital returned to U.S. equities, even though a good portion of the emerging-market uncertainty had not meaningfully changed.

Areas of Risk: Contagion Sources and Recipients

What causes a country or region to be prone to financial or economic crisis? If we boiled it down to simplest terms, we would cite two main factors: bad policy choices and/or living beyond their means. In the case of Ukraine, both factors have come into play. The former pro-Russian Ukrainian president, Viktor Yanukovych, was removed from power earlier this year by a frustrated populace. That frustration had grown after the country built up large fiscal deficits, fell into greater debt, and entered its third recession since 2008. After years of negotiations with the EU for a package containing reduced tariffs, loans, and other financial incentives in return for democratic reforms, Yanukovych turned his back on the EU to sign a financing deal with Russia. Ukrainian protests in opposition to the closer Russian ties turned violent, and on February 22, Yanukovych fled the capital.

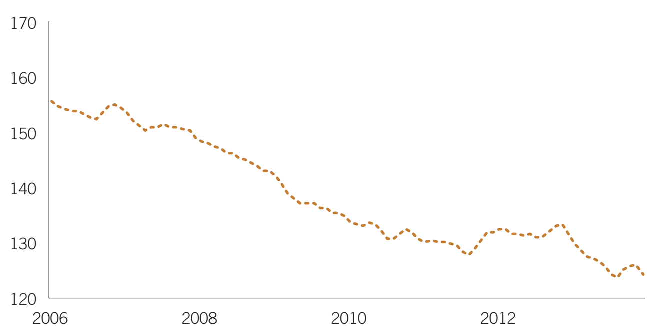
Another timely example is Puerto Rico. The island commonwealth of the U.S. has been in a recession since 2006. While the government is now starting to implement needed reforms, it remains unclear whether these policy shifts are too little, too late. Amid high unemployment (15.4%) and a growing crime rate, more and more Puerto Ricans are leaving for the mainland U.S. That makes collecting taxes to fill a growing budget deficit even more challenging (the island's public sector debt stands at more than 55% of GDP, versus total U.S. state public debt around 7% of GDP).

Puerto Rico and Ukraine are vastly different in many ways but have some fundamental variables in common. Both have relatively high, and rising, debt levels (in absolute terms and as a percentage of GDP). Both also have had slowing economies that exacerbated the frustration felt by local populations towards respective political leaders (Exhibit 3).

Exhibit 3: High Debt Levels, Slowing Growth Leave Countries at Greater Risk of Contagion

Ukraine Industrial Production

Puerto Rico Economic Activity Index



As of February 28, 2014, except for Puerto Rico Economic Activity, which is as of December 31, 2013 and represents a composite of total payroll employment, cement sales, gasoline consumption, and electric power consumption (until March 2012). As of April 2012, the electric power consumption variable was replaced by the electric power generation variable as the fourth indicator.
Source: Bloomberg, Government Development Bank of Puerto Rico

When we look at other countries that have been sources of contagion in recent years — places like Iceland, Greece, and Cyprus — there were other common fundamental factors that frequently appeared:

- overvalued currencies,
- lack of policy levers to deal with domestic vulnerabilities,
- overextended and/or fragile banking systems,
- consumers that were heavily reliant on credit (rather than growing disposable incomes, as was increasingly the case in the U.S. into the 2008 crisis), and
- local markets that were dependent on short-term foreign capital flows.

In some cases, the trigger for the crisis was local, such as protests against the country's leadership, or a sudden, unexpected policy action. In most cases, though, the trigger was "monsoonal" — a broader, common shock such as rising U.S. interest rates. Those shocks tended to expose the other vulnerabilities that had been building quietly for years. The pattern is reminiscent of a quote from legendary investor Warren Buffett: "Only when the tide goes out do you discover who's been swimming naked." When broader economic supports are removed, local fundamental vulnerabilities are exposed and crises become suddenly more likely.

Contagion Rules of the Road

With so many moving parts, can investors ever really get ahead of sources of contagion or their transmission channels? Indeed, the psychological aspect of contagion — both investor risk appetite and sentiment of local populations — makes forecasting contagion difficult at best. Still, we can use historical patterns to at least provide some rules of the road.

1. **Greater debt = greater risk.** Debt, or living beyond your means, can take different forms. Government, corporate, and consumer debt all matter. Historically, though, it was high and rising levels of *government* debt that more frequently triggered a crisis. Large debt levels can increase economic vulnerability, particularly to a sudden rise in interest rates. Paying interest on that debt necessitates higher taxes that may undermine growth. Early March saw Puerto Rico issue $3.5 billion worth of municipal bonds. While the bond sale provided funds to keep public-sector operations running through June 2015 and reduced the risk of a more immediate crisis, the bond's 8.73% yield left local policymakers with an even bigger bill to pay in the future.
2. **Beware concentrations of foreign capital.** High debt by itself does not guarantee a local economic or market crisis. Consider Japan: Its high and rising debt levels (net government debt was around 140% of GDP last year) suggest the country should be a poster child for "islands in a storm." Yet Japan's currency and equities have had no consistent relationship with either changes in the country's government debt levels or the country's absolute debt levels. We believe this is partly because nearly 95% of debt is held by Japanese residents and institutions, few of whom seem inclined to sell much of their debt quickly, if at all. A similar phenomenon, with large local ownership of government debt, helped Italy fare better than its beleaguered peripheral European Monetary Union (EMU) neighbors between 2009 and 2012.

   Areas of the world that get in trouble from over-indebtedness tend to have a significant portion of local debt held overseas. If foreign debt holders lose confidence in a government's ability to control its budget deficits or to continue financing debt in international markets, bond sales can push up borrowing costs and weaken currencies quickly. Such was the case across peripheral euro-area countries such as Ireland

between 2009 and 2012, and more recently across a number of emerging markets ranging from Malaysia to South Africa to Indonesia (Exhibit 4).

3. **Take comfort in current-account surpluses.** A country's current-account balance primarily reflects cross-border trade of goods and services. A surplus indicates that an economy is a net creditor to the world; it is a net exporter and thus is owed money in return. Foreign entities need to buy that country's currency to pay their bills, helping to support the currency. While a country with a current-account surplus can still be economically weak, history shows that countries with surpluses, or at worst small and narrowing deficits, have generally proven less prone to shocks or contagion. Singapore is a good example here. While Singapore's economic prospects are heavily influenced by China, the island nation has been less sensitive to the Chinese slowdown (relative to neighbors), partly because of its massive current-account surplus (estimated at 18.6% of GDP in 2012).

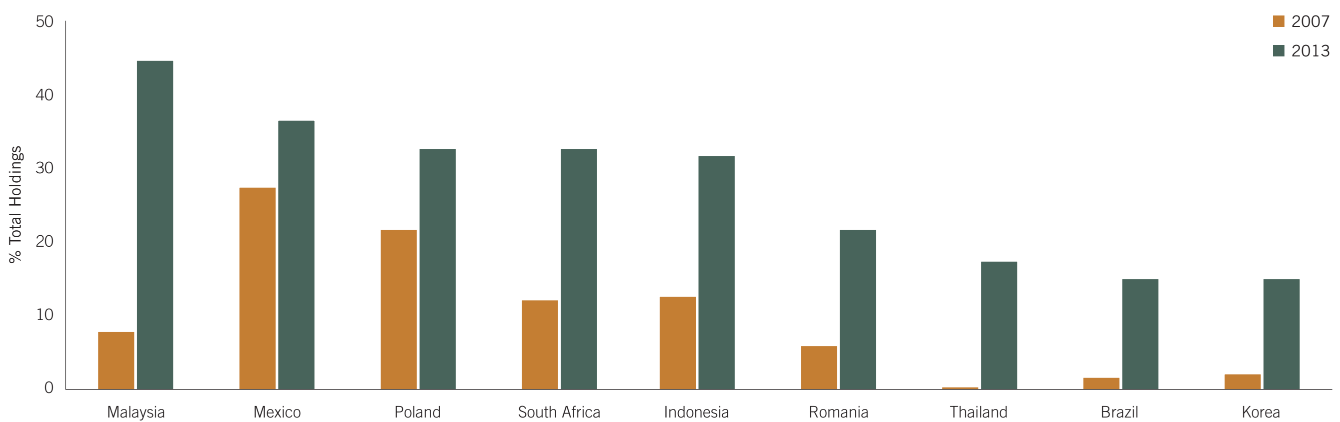
4. **More is better when it comes to policy tools.** Countries or regions with large policy toolkits, all else equal, are more likely to avoid becoming contagious. Japan has navigated its debt overhang in part through active fiscal and monetary actions (the latter helping pull down the yen some 24% against the dollar between October 2012 and March 2014), as well as the government's "moral suasion" tool, which encouraged major local institutions not to sell government bonds quickly. China is another example of a country managing fundamental challenges through policy tools. In contrast, peripheral euro-area countries such as Ireland were more prone to contagion in recent years as they did not control national monetary or exchange rate policy; further, fiscal policy flexibility was limited by EMU guidelines. Puerto Rico faces similar challenges today, with no command over monetary or currency policy.

Looking Ahead: Balancing Risk and Reward

As we look ahead, we are positioned for continued contagion from a shifting Fed policy and a slowing China. We are also focused near-term on Indonesia, South Africa, India, and the EU in particular — all are scheduled to have critical elections this spring and exhibit a number of the vulnerabilities we noted above. We account for these monsoonal and idiosyncratic risks in our portfolio through an underweight allocation to traditional fixed income, commodities, and emerging-market equities. Portfolio diversification (where deemed appropriate for individual clients) also helps us navigate potentially stormy waters.

Exhibit 4: Foreign Ownership Can Lead to Greater Risk for Emerging Markets

Foreign Ownership of Local Bonds



As of December 31, 2013.
Source: J.P. Morgan

That said, contagion and bouts of volatility do not necessarily equate to a broadly bearish view of the world. Consider the S&P 500: Going back to 1980, the average of the largest intra-year decline for the S&P across all years was -14%, but the index still ended the calendar year higher 76% of the time (with an average calendar-year gain for the entire period of 10%). Indeed, despite some risks, our base-case scenario continues to look for a gradual improvement in global growth this year, led by developed economies (Exhibit 5). That growth, in turn, is being helped by still-easy global monetary policy, very modest inflation, and less restrictive fiscal policies. Developed equities should benefit from this slowly brightening growth backdrop. Also helping their prospects are valuations that are fair but not expensive, and still-light investor exposures. (Between 2009 and 2013, equity mutual and exchange-traded funds have seen net inflows only a third of the size of total net inflows into bonds over the same period.)

As always, our approach drives us to seek the balance that best positions our clients to capture attractive returns amid what can be volatile environments. Our emphasis on rigorous independent research allows us to keep an eye on potential risks and to protect in difficult periods while also enabling us to capitalize on investment opportunities.

Exhibit 5: Tactical Macro Views and Portfolio Implications

Macro-Economic View	***Portfolio Positioning***
Better global economic growth, led by developed markets	Overweight equities, with a focus on developed stocks (U.S., European Union)
Central bank policy still supportive, though Fed tapering continues	Underweight traditional fixed income; broadly bullish U.S. dollar
Many emerging markets (EM) face growth and policy headwinds	Underweight EM equities; reduced exposure to EM debt/currency
Modest EM demand, stronger dollar, low inflation limit commodity gains	Underweight commodities
Markets seeing more volatility than in 2013	Maintain some defensive strategies, including fixed income and opportunistic assets

Past performance is no guarantee of future results. This material is provided for your general information. It does not take into account the particular investment objectives, financial situation, or needs of individual clients. This material has been prepared based on information that Bessemer Trust believes to be reliable, but Bessemer makes no representation or warranty with respect to the accuracy or completeness of such information. This presentation does not include a complete description of any portfolio mentioned herein and is not an offer to sell any securities. Investors should carefully consider the investment objectives, risks, charges, and expenses of each fund or portfolio before investing.

Views expressed herein are current only as of the date indicated, and are subject to change without notice. Forecasts may not be realized due to a variety of factors, including changes in economic growth, corporate profitability, geopolitical conditions, and inflation. The mention of a particular security is not intended to represent a stock-specific or other investment recommendation, and our view of these holdings may change at any time based on stock price movements, new research conclusions, or changes in risk preference. Index information is included herein to show the general trend in the securities markets during the periods indicated and is not intended to imply that any referenced portfolio is similar to the indices in either composition or volatility. Index returns are not an exact representation of any particular investment, as you cannot invest directly in an index.

Atlanta • Boston • Chicago • Dallas • Denver • Greenwich • Los Angeles • Miami • Naples
New York • Palm Beach • San Francisco • Washington, D.C. • Wilmington • Woodbridge
Cayman Islands • New Zealand • United Kingdom

Visit us at www.bessemer.com.

Copyright © 2014 Bessemer Trust Company, N.A. All rights reserved.