Is the euro area heading for Japan-style deflation?

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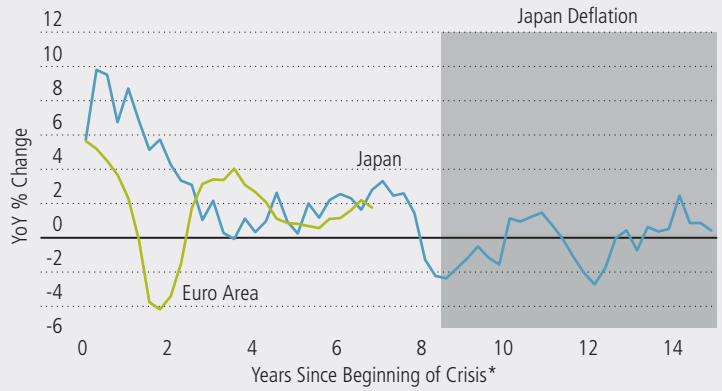
Deflation in the Euro Area: Are We There Yet?

With the European Central Bank (ECB) finally recognizing that the euro area is battling against severe deflationary headwinds, further policy easing looks likely. This should help anchor bond yields, but may not be enough to overcome the huge challenges facing the region.

There are important parallels between the euro area and Japan in several areas associated with the latter's persistent deflation. But whether or not the euro area actually experiences a period of declining prices is now a moot point, in our view. To the extent that a deflationary environment can be characterized by extremely weak nominal growth (*Display 1*), upward pressure on debt ratios and very low interest rates, the euro area is already halfway there.

Display 1: Turning Japanese?

Nominal GDP Growth



Historical analysis does not guarantee future results.
Through June 30, 2014.
*Beginning of crisis is 1Q 1990 for Japan and 3Q 2007 for the euro area.
Source: Haver Analytics

We doubt that deflation in the euro area would play out in the same way that it has done in Japan. There are two main reasons for this: 1) the starting point for government debt and unemployment is much higher in the euro area; and 2) the lack of burden-sharing mechanisms in the region. One way or another, the euro area's "lost" period would be unlikely to last for two decades.

Fortunately, the ECB now recognizes the gravity of the situation and is likely to ease policy further in coming months—probably including controversial sovereign-bond purchases. This, in turn, should help anchor core euro-area bond yields.

Phantom Menace

On two occasions this year, the ECB has reacted surprisingly forcefully to signs of weak growth and low inflation. In our view, this reflects deep concern that the euro area may soon follow Japan into a period of sustained deflation.

It's against this backdrop that we should consider a recent speech by ECB president Mario Draghi,[1] in which he warned that unacceptably high rates of unemployment pose an existential threat to the single currency itself. He called for a broad-based policy response, with monetary, fiscal and structural policies working in concert—not unlike the "Three Arrows" approach pioneered by Japan's prime minister, Shinzo Abe.

Importantly, Draghi also argued that the

[1]*Mario Draghi, "Unemployment in the Euro Area" (August 2014).*

Display 2: Slow Policy Response

Change in Monetary Base Since January 2008

Historical analysis does not guarantee future results.
Through September 30, 2014.
Source: Haver Analytics

risks of "doing too little" now outweigh the possible costs of "doing too much." This brings the ECB—or, at least, its president—in line with mainstream thinking on deflation, e.g., it's so corrosive that central banks should do everything in their power to avoid it.

We think this view is too simplistic. The historical record on deflation is more mixed than widely assumed, and heavily distorted by the impact of the Great Depression.[2] Moreover, as demonstrated by the credit-fueled boom that preceded—and ultimately led to—the global financial crisis, setting monetary policy explicitly to avoid deflation can have catastrophic consequences.

But the demonization of deflation is not the main issue here. What's important is that the president of the ECB now accepts a key principle used to justify aggressive monetary policy responses in countries like the US, the UK and Japan.

Many would say that this conversion is long overdue. Indeed, our own analysis finds worrying parallels between the euro area and Japan in several key areas. As a result, we think there's now a material risk that the euro area could succumb to deflation.

In light of this, it's important to consider whether the ECB is doing enough to ward off deflation. We're doubtful, and think the balance of risks remains heavily skewed toward further monetary easing.

Familiar Fears

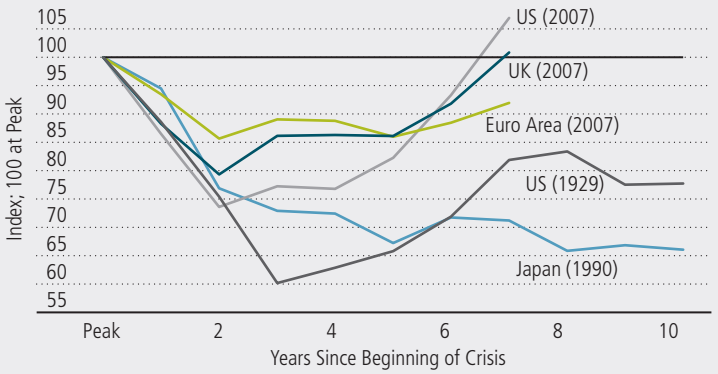
Deflation fears in the euro area are not new (nor are concerns about its long-term growth prospects, which surfaced long before the launch of the euro). In 2003, when markets first started to fret about falling prices, our research showed that the euro area was more at risk of deflation than the US. And we reached a similar conclusion in the early stages of the sovereign-debt crisis, when we found that the euro area was more likely than the US to suffer a repeat of Japan's "lost decade."

So, just how serious is the current threat? One way to answer this question is to identify the factors associated with deflation in other countries and analyze how the euro area measures up in these areas. But there's a problem with this approach: deflation has been extremely rare in the postwar/fiat-currency era.[3] In fact, Japan has been the only example of true deflation since the middle of the last century.

Because of this, we need to recognize

Display 3: Asset Prices After the Bubble Bursts

Composite Asset Price Indicator*



Historical analysis does not guarantee future results.
Through September 30, 2014.
*Weighted average of house prices (75%) and equity prices (25%) .
Figures in parentheses show peak year/beginning of crisis for each country.
Source: Haver Analytics

[2]*See, for example, Bank for International Settlements (BIS), "Deflation in a Historical Perspective" (November 2005).*
[3]*Fiat (or paper) money derives its value from the backing of government and has no intrinsic value of its own.*

that idiosyncratic factors may have reinforced deflationary trends in Japan. And this means we need to be careful when considering whether other countries are likely to follow in its footsteps. Still, a lack of alternatives limits our options. So, with this caveat in mind, let's consider several factors often cited as causes of Japan's deflation and examine how the euro area compares in these areas.

Recipe for Deflation

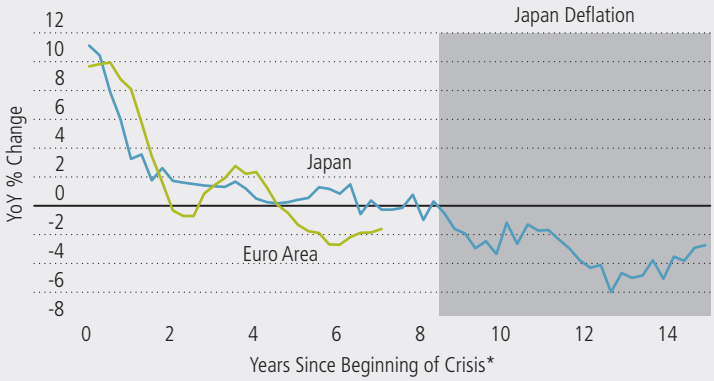
There has been an enormous amount of research into the causes of Japan's deflation. The following factors feature prominently in the debate:

- Collapse of an asset-price bubble
- Inadequate monetary policy response
- Failure to "fix" the banks
- Adverse demographic trends
- A large and persistent output gap
- A rising exchange rate

It's unlikely that any one of these factors alone can account for the sustained nature of Japan's deflation. Nor are they likely to be independent. For example, some combination of the other factors may have led to the emergence of a large output gap in the mid-1990s, just before the onset of deflation.

Display 4: Failing to Fix the Banks

Bank Lending Growth



Historical analysis does not guarantee future results.
Through August 31, 2014.
*Beginning of crisis is 1Q 1990 for Japan and 3Q 2007 for the euro area.
Source: Haver Analytics

Bubble Trouble

Like Japan, and the US during the Great Depression, the euro area's troubles were triggered by the collapse of an asset-price bubble (after the bankruptcy of Lehman Brothers in 2008). This highlights the key role that debt and asset prices play in the deflationary process:

"It is asset-price deflations rather than general deflations that have consistently and significantly harmed macroeconomic performance."

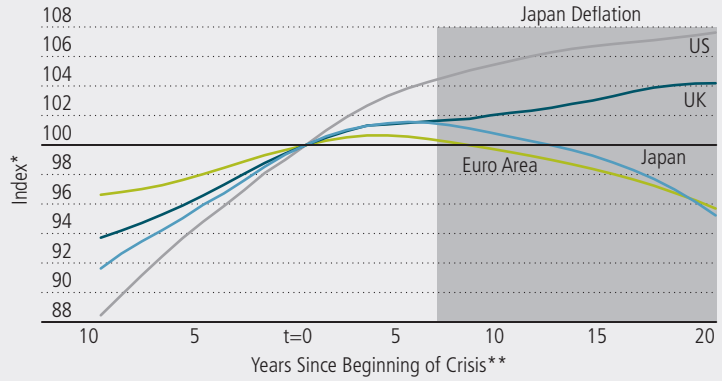
(BIS Annual Report, 2014)

However, much of the literature also highlights the key role that policy error has played in exacerbating deflationary trends. Despite the ECB's claims that it "took decisive action at a very early stage of the crisis,"[4] the evidence suggests that it has not responded aggressively enough to deflation risk—the same mistake made by the Bank of Japan in the 1990s and the US Federal Reserve in the 1930s.

We can highlight this by comparing the ECB's balance sheet with those of the Fed and the Bank of England (*Display 2, previous page*). Since the beginning of

Display 5: Euro Area's Demographic Outlook Similar to Japan's

Working-Age Population (Actual and Projected)



*Index rebased to 100 at beginning of crisis.
**Beginning of crisis is 1Q 1990 for Japan and 3Q 2007 for the other regions.
Source: Haver Analytics and United Nations

[4]*ECB president Mario Draghi (September 25, 2014).*

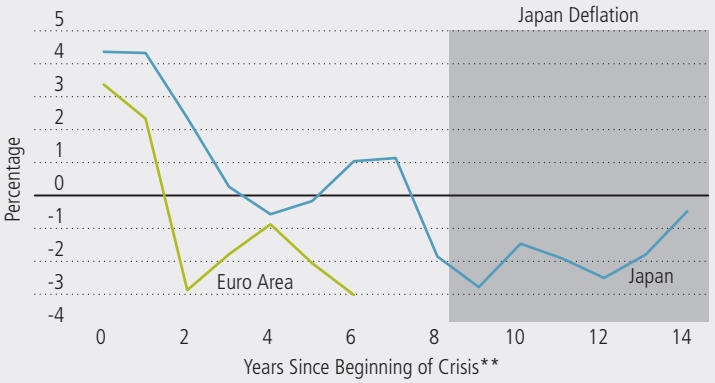
2008, the monetary base in the US and the UK has risen by over 15% of gross domestic product (GDP). Over the same period, the monetary base in the euro area has risen by just 3% of GDP.

These different approaches have led to very different outcomes for asset prices. In all three regions, monetary policy helped halt the drop in asset prices seen after the collapse of Lehman Brothers, preventing a repeat of the slumps seen in Japan during the 1990s and the US during the 1930s (*Display 3, page 2*).

But that's where the similarities end. In the US and the UK, aggressive monetary policy action has helped push asset prices back above their precrisis peaks. In the euro area, however, asset prices have not recovered and are still about 10% below their precrisis peak.

Display 6: Large and Persistent Output Gap*

Difference Between Actual GDP and Potential GDP



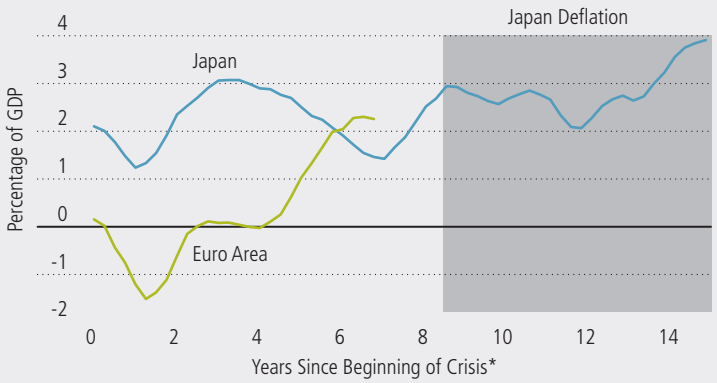
Historical analysis does not guarantee future results.
Through December 31, 2013.
*Average of European Commission, International Monetary Fund (IMF) and OECD estimates.
**Beginning of crisis is 1Q 1990 for Japan and 3Q 2007 for the euro area.
Source: Haver Analytics

"Zombie" Banks

Another factor widely thought to have contributed to Japan's deflation is the failure to restore health to the banking system and thus ensure the efficient allocation of credit. As the BIS recently noted, in the aftermath of a financial crisis, "*it is the failure to tackle the malfunctioning of the banks…that could make the problem chronic.*"[5]

Display 7: External Position Shifts into Surplus

Current Account Balances



Historical analysis does not guarantee future results.
Through June 30, 2014.
*Beginning of crisis is 1Q 1990 for Japan and 3Q 2007 for the euro area. Four-quarter rolling average.
Source: Haver Analytics

Although the ECB recognizes that weak banks played a key role in reinforcing deflationary trends in Japan, it has tried to downplay any similarities to the euro area. However, the ECB's actions—e.g., targeted longer-term refinancing operations (TLTROs) and its new asset-backed securities and covered-bond purchase programs—suggest that it is still deeply concerned about credit provision in the euro area. We share these concerns. As *Display 4, previous page*, shows, the recent path of credit growth in the euro area looks similar to (if not worse than) the one followed by Japanese credit growth in the 1990s.

Demographic Deficit

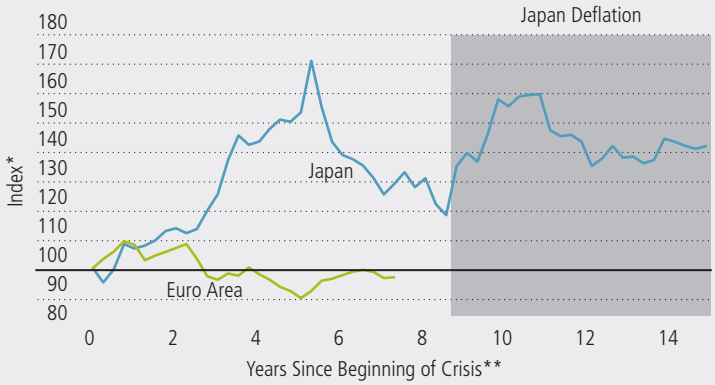
So far, we have focused on the deflationary consequences of the collapse of an asset-price bubble and policy error—factors common to Japan's deflation and the Great Depression in the 1930s. But one factor specific to Japan that's frequently associated with downward pressure on prices is its rapidly aging population.

If adverse demographic trends have

[5]*BIS Annual Report, 2014.*

Display 8: No Repeat of Yen's Massive Rise

Nominal Effective Exchange Rate Index



Historical analysis does not guarantee future results.
Through September 30, 2014.
*Index rebased to 100 at beginning of crisis.
**Beginning of crisis is 1Q 1990 for Japan and 3Q 2007 for the euro area.
Source: Haver Analytics

contributed to Japan's "lost decade," then there's every reason to be concerned about the outlook for the euro area. According to the United Nations, the working-age population in the euro area has already peaked and is expected to decline by 8.5% over the next 20 years. This is very similar to the 8.9% decline in Japan's working-age population over the past 20 years (*Display 5, previous page*) and is in sharp contrast to the US and the UK, where the working-age population is expected to continue growing.

Mind the Gap

The output gap measures the difference between actual output (demand) and potential output (the level of output an economy can sustain without putting undue pressure on productive resources). A negative output gap means that actual output/demand is below potential output/supply, putting downward pressure on inflation. In extreme cases, when the (negative) output gap is large and persistent, deflation can result.

Although output gaps are not directly observable, estimates from leading international organizations suggest that the euro area has been running a large negative output gap for the past five years (*Display 6, previous page*). This is comparable in size to Japan's output gap when it entered deflation in 1998.

Land of the Rising Yen

Although the yen has fallen significantly over the past two years, its behavior in the 1990s was very different. Thanks in part to Japan's large current account surplus, the yen rose dramatically in the first half of the 1990s. This lowered import prices, put downward pressure on wages and exacerbated deflationary trends.

Like Japan in the 1990s, the euro area is now running a large external surplus (*Display 7, previous page*). Fortunately, however, the euro has not followed the same upward path as the yen (*Display 8*).

In spite of this, the euro has to share some of the blame for the region's current difficulties. That's partly because some countries are not competitive at the current exchange rate, and partly because the single currency has led to reduced monetary and exchange-rate flexibility in the euro area—making it difficult for some countries to cope with the impact of declining asset prices and aggressive fiscal tightening.

Turning Japanese?

To the extent that the exchange-rate regime has exacerbated deflationary

Display 9: Too Close for Comfort?

Deflation Checklist

	Japan	Euro Area
Asset Prices	✓	o
Policy Response	✓	✓
"Fixing" the Banks	✓	✓
Demographics	✓	✓
Output Gap	✓	✓
Exchange Rate	✓	✗
Total	6	4½

Source: AllianceBernstein

Introducing the Deflation Risk Index

Our deflation risk index (DRI) is based on an approach adopted by the IMF in 2003. We have expanded the list of variables and modified the scoring system.

The IMF uses 11 variables to assess deflation risk, assigning a score of +1 every time an indicator breaches a certain threshold (e.g., +0.5% for core inflation) and zero otherwise. The scores are then added up and divided by 11 to give the total score.

Our approach is similar. However, we use 14 variables and assign a score of +2 if an indicator is particularly bad (below –0.5% for core inflation) and –1 if an indicator is significantly higher than the threshold (above +2% for core inflation), thus acting to offset deflation risk.

The appeal of the DRI is that it captures most of the variables thought to be responsible for Japan's deflation (although there is no demographic input). The following variables are used:

- Three measures of inflation (core inflation, the GDP deflator and a rolling three-year average of headline inflation)
- The size of and change in the output gap
- The rate of economic growth relative to the historical trend
- The level of and change in asset prices (equity and housing)
- The level of and change in the exchange rate
- Credit growth
- Monetary conditions (money supply growth, real interest rates and the change in the central bank's balance sheet)

In interpreting the DRI, a total score below zero indicates that deflation risk is very low; a score of 0.0–0.2 indicates that it is low; 0.2–0.4 indicates that it is moderate; 0.4–0.6 indicates that it is high; above 0.6, deflation risk is regarded as being very high. ■

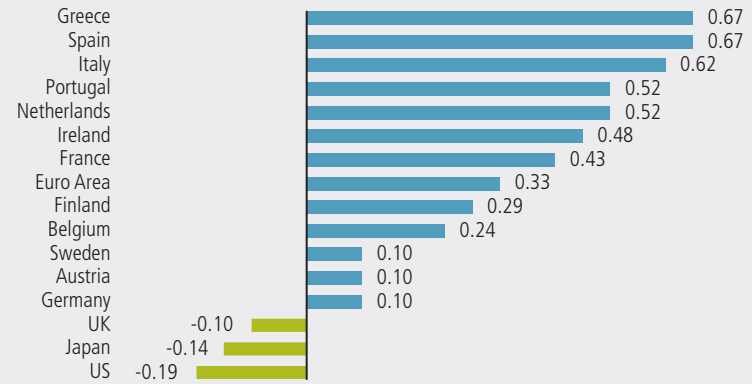
tendencies in the euro area, it should really be regarded as policy error. Our analysis therefore finds important parallels between the euro area and Japan in four of the six areas associated with the latter's persistent deflation—an inadequate policy response, failure to fix the banks, adverse demographic trends and a large and persistent output gap—but not for exchange-rate changes.

For asset prices, the comparison is more ambiguous. The euro area's difficulties were triggered by a collapse in asset prices, which remain below precrisis levels. But the decline in prices has been quite modest compared with Japan in the 1990s or the US in the 1930s.

These findings are summarized in the deflation checklist (*Display 9, previous page*), which gives the euro area a rating of 4½ out of 6 (or 75%)—or too close for comfort, in our view.

Display 10: Deflation Risk Varies Widely Across the Euro Area

Deflation Risk Indexes* (3Q 2014)



Historical analysis does not guarantee future results.
Through September 30, 2014.
*See sidebar for further details.
Source: AllianceBernstein

The Same but Different

The fact that the euro area shares several common features with Japan does not, of course, mean that it will automatically follow a similar path. Indeed, if deflationary forces do gain traction in the euro area, we think they will play out very differently.

The main reason for this is that the euro area is a group of sovereign nations rather than a country or true political union. This has important implications.

First, some euro-area countries are more vulnerable to deflation than others. We

can illustrate this using our deflation risk index (see sidebar above) which shows that deflation risk is very low in Germany, moderate for the euro area as a whole and very high in Greece, Spain and Italy (*Display 10*). Even if the euro area as a whole manages to avoid deflation, some countries might not be so lucky—which could have profound implications for the stability of the region.

Second, the starting point for unemployment is much higher in the euro area than it was in Japan. This is particularly true for the periphery. As Mario Draghi recently noted, "the long-term cohesion of the euro area depends on each country in the union achieving a sustainably high level of employment."[6] It's hard to see how this would be possible in a deflationary environment.

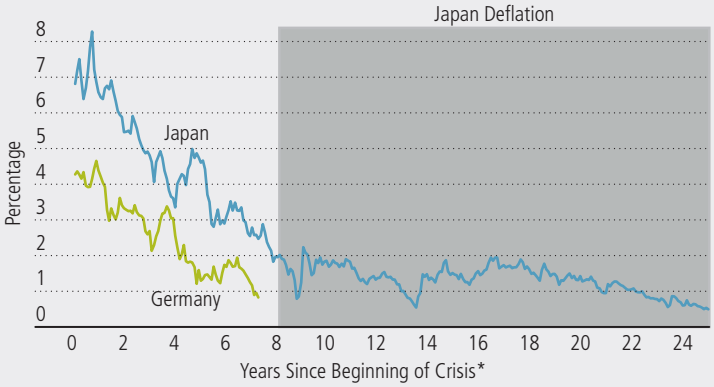
Third, a sustained period of deflation—or even very low inflation—would put public sector debt dynamics on an unsustainable path in a number of euro-area countries, eventually triggering another sovereign-debt crisis. Deflation and high debt levels are a toxic combination.

Perhaps surprisingly, even though gross and net government debt have risen to a staggering 243% and 134% of GDP, respectively, Japan has not (yet) experienced a fiscal crisis. That's mainly because the Japanese private sector is a big net saver and because domestic investors are willing to hold domestic government bonds at extremely low interest rates.[7] (The Japanese government's net interest bill last year was just 1.0% of GDP compared with 2.6% for the euro area and 2.5% for the US, where debt levels are much lower.)

At present, most euro-area countries are also benefiting from very low interest rates. But that's largely due to the ECB. Without greater explicit burden sharing (i.e., joint responsibility for government debt), we doubt that this artificial situation would be sustainable should deflationary forces lead to a deterioration in debt dynamics in the periphery. One way or another, the euro area's "lost" period would be unlikely to last for two decades.

Display 11: Are Bond Markets Priced for Deflation?

10-Year Government Bond Yields



Historical analysis does not guarantee future results.
Through October 16, 2014.
*Beginning of crisis is 1Q 1990 for Japan and 3Q 2007 for Germany.
Source: Bloomberg

Are We There Yet?

Earlier, we suggested that the historical record on deflation is more mixed than widely assumed. In spite of this, it's very clear that the euro area is not well placed to deal with a sustained period of falling prices. Nor, in fact, is it well placed to cope with a prolonged period of low nominal growth.

"The big problem at the moment is a prolonged period of low nominal growth, so low inflation and low growth. This creates debt sustainability problems—both for private households and governments."

(ECB vice president Vitor Constâncio, September 2014)

This brings us to a key point. Although consumer prices have not (yet) started to fall in the euro area, the environment could be described as "deflationary" in one key respect: nominal GDP growth is very weak, putting upward pressure on debt levels and downward pressure on interest rates. To some extent, the euro area is therefore already operating in a deflationary environment. And, judging by current bond yields (*Display 11*), many investors seem to recognize this.

Given this backdrop, it's important to ask whether the ECB has done enough to ward off the spectre of deflation?

So far, we think the answer is no. The good news, though, is that the central bank's thinking has evolved rapidly in recent months. Under Mario Draghi's stewardship, the ECB finally seems to recognize the scale of the threat now facing the euro area.

As Draghi himself has noted, monetary policy may be approaching the limits of what it, alone, can achieve (the ECB can do little, for example, about the region's low trend growth rate). Nonetheless, we expect the central bank to inject fresh stimulus in the near future—including controversial sovereign bond purchases—and think that monetary policy will be biased toward further easing for some time to come. ■

[6] *Mario Draghi, "Unemployment in the Euro Area" (August 2014).*
[7] *This is the conundrum. In order for Japan to break free from deflation, private sector investment needs to rise, but this would lead to lower net savings, force interest rates higher and trigger a fiscal crisis. The BIS referred to this phenomenon as a "debt trap."*

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