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## Sayonara Deflation: Japan Turns to “Q-Squared”

### Executive Summary

- Global investors have been conditioned to take notice of bold and innovative central bank policy.
- Domestic Japanese investors are skeptical that these policies will work, but should not underestimate BoJ Governor Haruhiko Kuroda’s resolve.
- Aggressive expansion of the BoJ balance sheet should facilitate further yen weakness, but the trend will be slower. Investors should consider combining relative volatility strategies with directional views.
- Global bonds should continue to benefit from Japanese investors’ increasing allocations to foreign bond markets.

*With the strength of my entire Cabinet, I will implement bold monetary policy, flexible fiscal policy and a growth strategy that encourages private investment, and with these three policy pillars, achieve results.*

~Japanese Prime Minister Shinzō Abe (December 26, 2012)

After a period referred to by the Japanese as Ushinawareta Nijunen (Lost Two Decades), optimism about the world’s third largest economy has surged since the election of Shinzō Abe as Prime Minister in December 2012 and his announcement of an aggressive policy mix of monetary, fiscal and growth measures known as “Abenomics”. While history will judge if these measures are sufficient to reinvigorate Japan’s stagnant economy, we believe that Abe’s bold actions will continue to have significant implications for global asset prices, currencies and volatility.

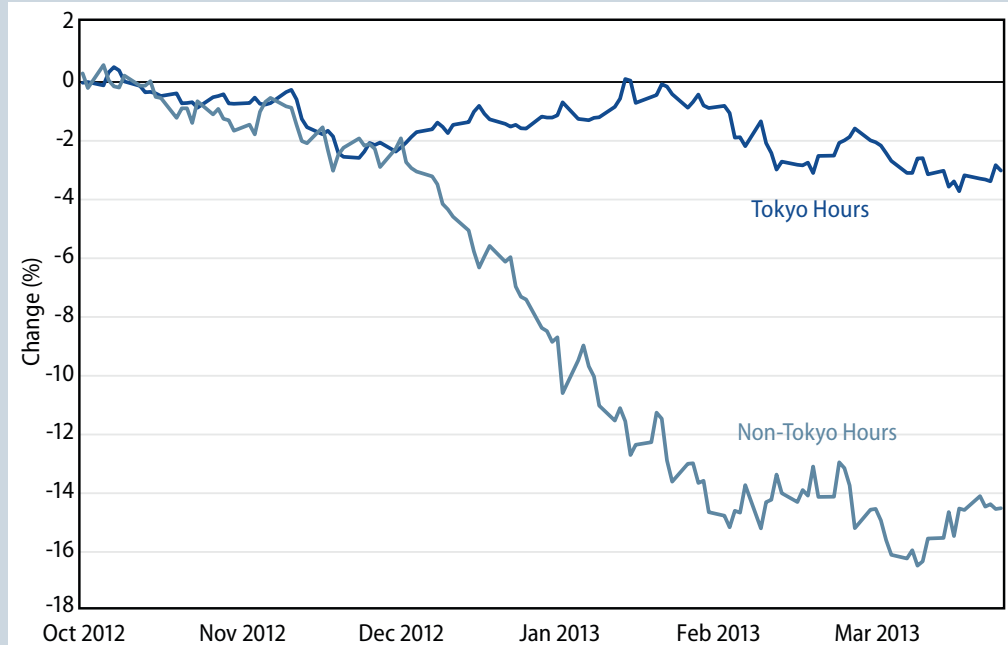
In this paper, Western Asset portfolio managers Andrew Cormack and Hiroyuki Kimura offer their insights on how both Japanese domestic and global investors perceive Abenomics. We will also focus on the broader investment implications of the policies and describe how we are currently positioned to take advantage of these dynamics in global portfolios.

### The Two Consensus Dilemma

There are two distinct consensus views on the potential policy impact of Abenomics on the Japanese economy. Outside of Japan, investors are generally optimistic, a view that is reflected in the 25% depreciation of the Japanese yen relative to the US dollar since Abe was elected leader of the Liberal Democrat Party (LDP) in September 2012. Importantly, the majority of the yen’s weakness has occurred outside of Tokyo trading hours (Exhibit 1).

In contrast, domestic investors are generally more skeptical that Abenomics will be successful in boosting growth and raising inflation expectations. Deflation is embedded in the Japanese psyche, and years of falling prices have conditioned consumers to defer current spending in expectation that they can buy goods later at lower prices. This trend has been exacerbated by Japan’s demographic challenges, whereby an aging population resists higher prices as these prices erode the future purchasing power of their savings. The institutional framework at the Bank of Japan (BoJ) is also seen as partly to blame, with policy being viewed as too tight and the BoJ too eager to tighten at the slightest signs of economic green shoots. Domestic investors remain cautious about rising prices in isolation following the 2011 Fukushima disaster, which highlighted Japan’s increased dependence on imported energy. Many argue that a weak yen is bad for the Japanese economy because prices will generally rise due to increased import prices and energy costs. Critics of this view argue that inflation in itself does not help an economy unless rising prices are accompanied by increases in real wages. In summary, domestic investors typically believe that higher prices and a weak currency are no substitute for policies aimed at improving productivity growth and competitiveness, long regarded as two key structural weaknesses in Japan’s economy.

Exhibit 1  
Yen Depreciation Versus US Dollar



Source: Bloomberg. As of 31 Mar 13

### The “Three Arrows”

Prime Minister Abe has likened his bold monetary, fiscal, and structural growth package to “three arrows.” Taken alone, each can be bent, but taken together, none can. Abe has promised an aggressive fiscal spending program which should offer an immediate boost to growth via an increase in government consumption and public investment. The growth strategy is equally important and will comprise regulatory reform, a revamping of information technology policies to establish a society that attracts high-level personnel, and the adoption of comprehensive childcare support to encourage higher female labour force participation and mobility. The primary focus of this paper is on the first of these “arrows”: monetary policy, as we believe it is important for investors to recognise what the BoJ Governor Haruhiko Kuroda is attempting. We examine similarities between Kuroda’s actions and those of the US Federal Reserve (Fed) and other developed central banks since the financial crisis.

At the April 4 monetary policy meeting, his first as governor, Kuroda surprised investors (and his critics) by announcing a bold set of quantitative and qualitative monetary easing measures (“Q-Squared”) aimed at achieving the BoJ’s 2% inflation target within two years and doubling the monetary base over the same period. Put simply, the bank will print enough yen to buy 75 million family-sized Toyota motor cars. Kuroda has signaled this is a “new phase” of monetary easing in both quantity and quality and, importantly, stressed that the BoJ will continue with quantitative and qualitative easing as long as it is necessary for maintaining its 2% inflation target.

By committing the BoJ to maintaining easy policy subject to specific parameters, Kuroda is experimenting with one policy tool used heavily in recent times by the Fed: forward guidance.

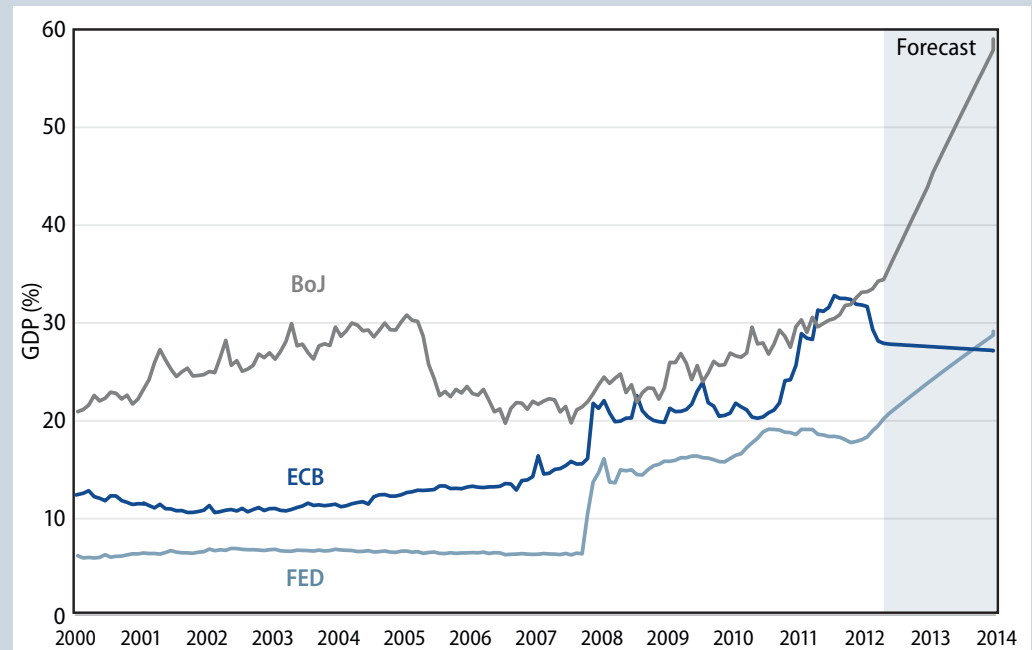
### Could It be Different this Time?

In our opinion, the divergence in views between overseas and domestic investors highlights the fact that animal spirits appear to have left Japan a long time ago. However, if a central tenet of Abenomics is changing

expectations, then we think it is appropriate, in light of the bold announcements from Kuroda, to challenge the domestic view that Abenomics will be unsuccessful. Are domestic investors ignoring an important shift in global monetary policy and the resolve of central banks adopted by other developed countries since the financial crisis? Kuroda seems determined to challenge the notion that deflation is a structural issue, and he believes he can break the deflationary cycle with bold monetary easing. He has pledged to expand the monetary base by ¥60 to ¥70 trillion annually.

Extrapolating these numbers forward (Exhibit 2) the Fed would have to increase its balance sheet by an extra US\$120 billion per month just to keep pace! The BoJ's balance sheet is expected to increase by 30% relative to the Fed over the next two years, which can only be described as bold, aggressive, and unprecedented in recent times for such a large developed economy. The argument between economists and investors over the potential fallacies of Abenomics will doubtless continue. However, we would argue that Kuroda is, at the very least, ensuring that among Abe's three “arrows” monetary policy will be extraordinarily supportive.

Exhibit 2  
Central Bank Balance Sheets as Percentage of GDP



Source: Bloomberg, Western Asset, Federal Reserve, BoJ, ECB. As of 31 Mar 13

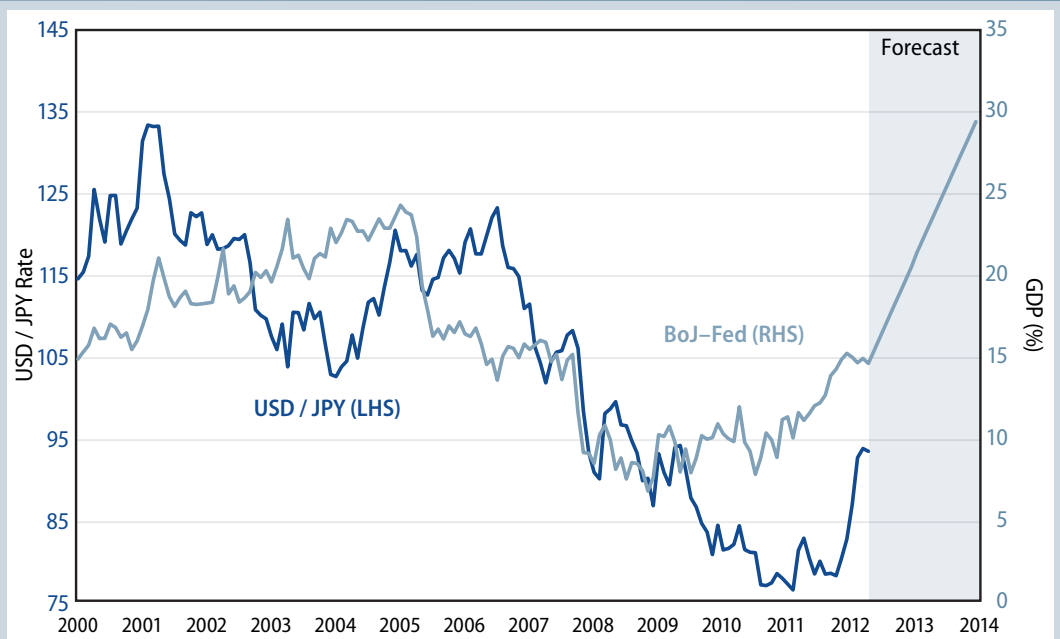
Under Chairman Ben Bernanke, the Fed has been at the forefront of recent monetary policy innovation with its implementation of quantitative easing programs, forward guidance, and more recently, its commitment to keep the federal funds target rate near zero until either the unemployment rate falls below 6.5% or inflation rises above 2.5%. Growth in the world's largest economy has consistently been above that of the UK, eurozone and Japan, so it is unsurprising that other central banks are taking notice. The European Central Bank (ECB) has finally become part of the solution after President Mario Draghi's commitment to “do whatever it takes to defend the euro” and subsequent announcement of Outright Monetary Transactions (OMTs), which have helped curtail systemic risk within the eurozone. Bank of England Governor-elect Mark

Carney has openly suggested that a nominal GDP target, whereby the central bank sets monetary policy based on both inflation and growth, would do more to boost economic output. Why then, in this new era of monetary policy innovation and forward guidance, should investors bet against Kuroda? Non-Japanese investors have become conditioned to the seismic impact that non-conventional monetary policy can have on global asset prices and currencies. Perhaps this explains why the majority of yen weakness, up to now, has been driven by global rather than domestic investors.

### Has Yen Weakness Run its Course?

Western Asset’s global bond portfolios have been underweight yen since early September 2012 and have benefited from the sharp depreciation in the currency. From here we expect further yen depreciation versus the US dollar to be a slower, more gradual trend which will be driven less by policy expectations and more by the relative expansion and contraction of bank balance sheets and the relative aggressiveness of central bank policy, which we believe is playing a dominant role in determining the relative level of exchange rates. One metric we look at to measure this is the relative contraction or expansion of central bank balance sheets (Exhibit 3). Based on our current projections, we expect the BoJ balance sheet to expand 30% more than the Fed’s over the next two years as a percentage of GDP. In a recent press conference, Kuroda was asked about the impact that a significant expansion of the monetary base has on an exchange rate. While he refused to answer the question directly, he did say “generally speaking” as a country’s monetary base expands, so its currency tends to depreciate.

Exhibit 3  
Relative Balance Sheets Versus USD / JPY

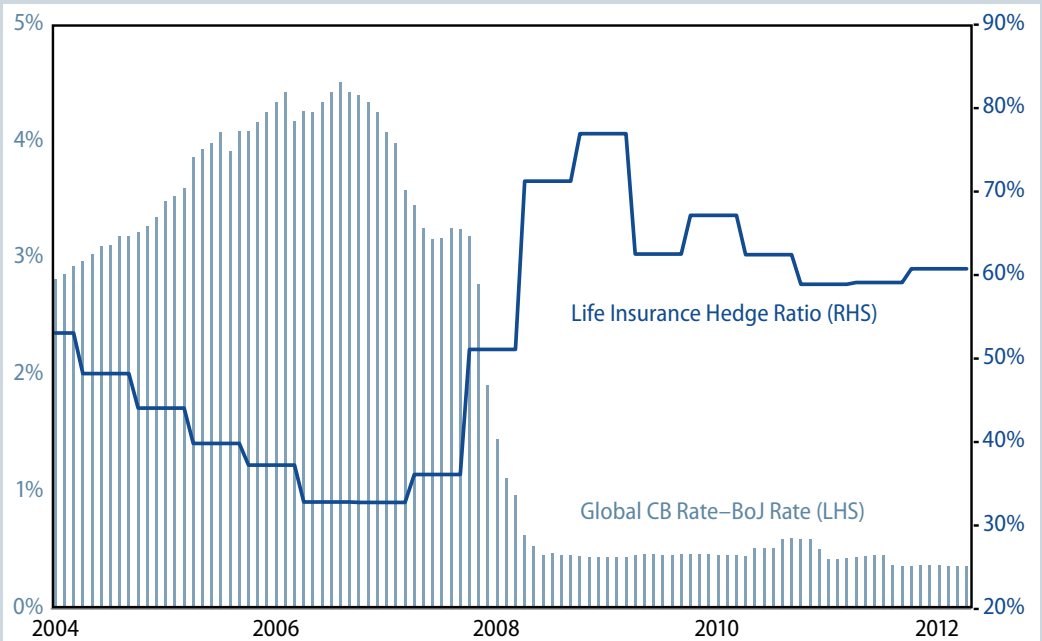


Source: Bloomberg, Western Asset. As of 31 Mar 13

Another key variable in driving the direction of the yen will be the reaction of domestic banks and insurance companies. The majority of Japanese life insurance firms have published their current fiscal year (April 2013 to March 2014) investment intentions and expect to 1) increase hedged foreign bond allocations and 2) reduce hedge ratios (the percentage of foreign bond allocations hedged back to yen). This hedge ratio

is determined primarily by the cost of hedging and investor expectations of future weakness or strength of the yen. Following the global financial crisis, major developed market central banks have embarked on an unprecedented round of policy easing which has led to a dramatic compression in the spread between global and Japanese domestic funding costs. Consequently, insurance companies have been able to hedge their foreign bond exposure at relatively cheap levels, and the resulting increase in hedge ratios coincided with yen strength between 2007 and 2012.

Exhibit 4  
Life Hedge Ratio Versus CB Base Rate Spread

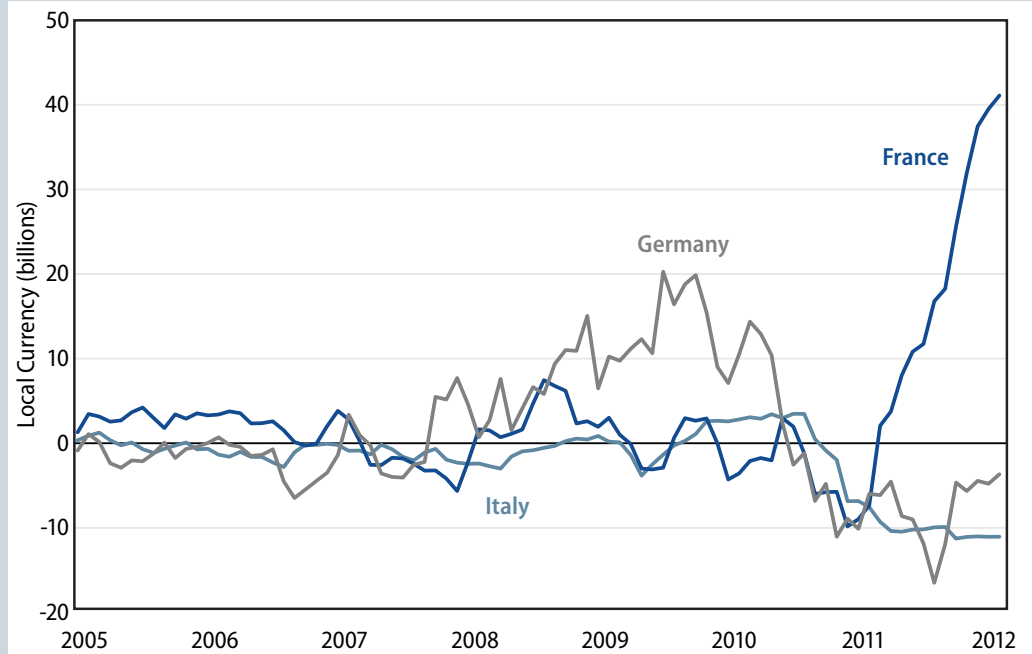


Source: Bloomberg. As of 31 Mar 13

Going forward, we believe that life insurance companies are likely to reduce their hedge ratios from current levels, and that this could put further downward pressure on the yen. In addition, the BoJ plans to absorb 1.5 times net Japanese Government Bond (JGB) issuance in 2013. This “crowding out” effect will likely encourage Japanese pension funds, banks and life insurers to buy other assets. Japanese equities are an obvious choice, but we also think overseas bond markets will be significant beneficiaries. For example, last year Japanese institutions purchased 25% of total French government bond supply (Exhibit 5).

As domestic investors sell domestic bonds to buy foreign assets, this could add further to yen depreciation. More importantly, if Abenomics is successful in changing domestic inflation expectations and the yen continues to trend lower, life insurance companies may be more willing to take overseas currency exposure. This combination of aggressive relative balance sheet expansion, increased foreign bond purchases and a potential reduction of hedges on foreign bond allocations may facilitate further yen weakness, a trend our portfolios are positioned to benefit from.

Exhibit 5  
Japanese Foreign Bond Transactions



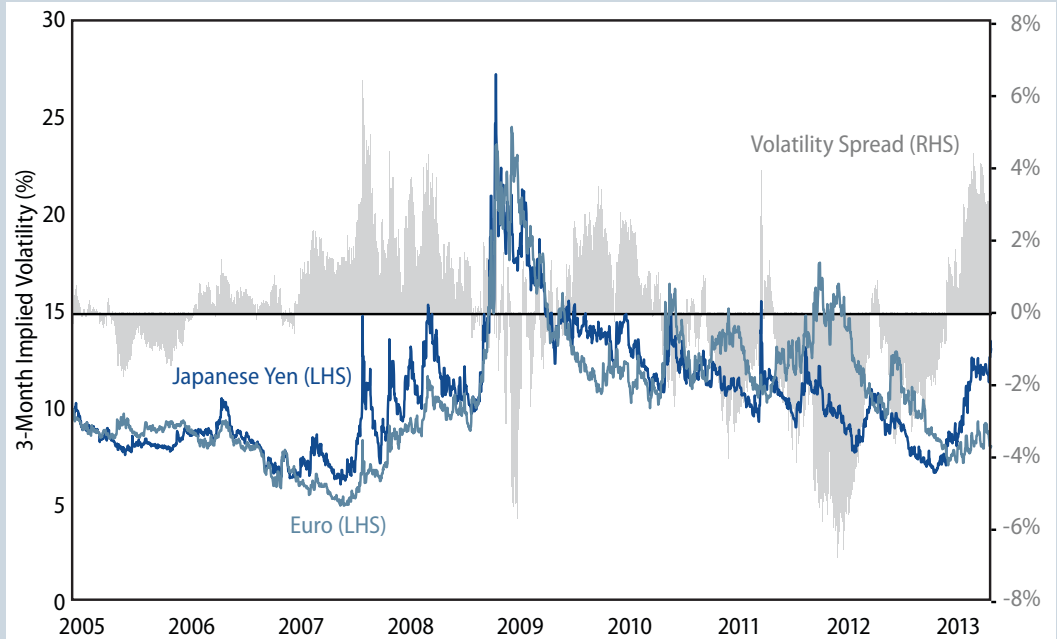
Source: Bloomberg, BoJ. As of 31 Dec 12

#### Investment Opportunities: Combining Directional Views with Volatility Trades

After such a sharp and sudden depreciation in the yen, expectations are mixed as to whether this weakness can persist. Our base case remains that the yen will continue to weaken over time, but that this second phase of yen weakness will be much more gradual. One aspect of the currency market that we think is mispriced relative to fundamentals is implied currency option volatility (the market expectation of volatility over a certain time period), which is high relative to historical levels. In particular, implied volatility under both weaker and stronger yen scenarios is high. Simply put, investors are willing to pay for protection against greater volatility going forward and are willing to pay the same for downside protection (yen weakness) as for upside protection (yen strength). Our view is that the yen is unlikely to strengthen significantly, so one strategy is to sell a yen call option to another investor, in which we would be obliged to sell a specified amount of yen if the currency strengthens to a particular level (the strike price). Thus, we think combining directional views with cheap volatility offers a good risk/reward profile. By contrast, euro volatility appears cheap relative to historical levels. In other words, the market is willing to sell cheap insurance on a further depreciation in the euro. We think this is misguided, particularly in light of recent German economic data, which have surprised to the downside, and potential ECB policy action in the near future.

One strategy we have used to take advantage of this is to sell out-of-the-money (OTM) calls on the yen to buy OTM puts on the euro.

Exhibit 6  
Historical 3-Month Implied Volatility



Source: Bloomberg. As of 31 Mar 13

### Win Both Ways?

In the short term, we have observed that bond prices are negatively correlated with the prices of risk assets, in that risk asset prices tend to fall in periods of flight-to-quality and bond prices tend to rise. However, over a longer period, and in particular since the financial crisis, both risk asset and bond prices have increased, which at first may appear counterintuitive. In our view, both interest rate and risk markets have been supported by extraordinarily supportive global monetary policy. Western Asset’s global portfolios have managed to “win both ways” with our diversified approach to portfolio construction, which combines long spread product exposure with long duration positions. We think Kuroda’s aggressive policy actions provide yet more support to portfolios that are positioned for tighter corporate bond spreads, diversified with long duration positions in select government bond markets.

Extraordinarily supportive global monetary policy remains firmly in place and Western Asset aims to ensure that our global clients are positioned to benefit.

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