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Global

Global Economics View

More Expansionary Monetary Policy Weakens the Currency: Get Used to It

- More expansionary monetary policy weakens the currency, *ceteris paribus*.
- That applies to Japan, just as it applies to the US, or any other country in the world. Since the exchange rate implications of monetary policy are sufficiently predictable and foreseeable – even if they are not of course *perfectly* predictable – it is reasonable and appropriate to hold monetary policymakers responsible and accountable for these exchange rate consequences and any external impacts. Whether these external consequences or implications are desired (or desirable), wanted or sought, or are instead just the (un)fortunate but foreseeable byproducts of monetary and fiscal policy undertaken for other reasons is irrelevant.

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The recent G7 statement on exchange rates

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The G7 statement on currencies of February 12, 2013 was an extraordinary exercise in banality, Newspeak and obfuscation. We cite it here in full:

"We, the G7 Ministers and Governors, reaffirm our longstanding commitment to market determined exchange rates and to consult closely in regard to actions in foreign exchange markets. We reaffirm that our fiscal and monetary policies have been and will remain oriented towards meeting our respective domestic objectives using domestic instruments, and that we will not target exchange rates. We are agreed that excessive volatility and disorderly movements in exchange rates can have adverse implications for economic and financial stability. We will continue to consult closely on exchange markets and cooperate as appropriate."

The first sentence *("We, the G7 Ministers and Governors, reaffirm our longstanding commitment to market determined exchange rates and to consult closely in regard to actions in foreign exchange markets")* is harmless. It tries to reconcile a belief in market determined exchange rates with the recognition that governments or central banks can be major, even dominant, players in the foreign exchange markets and other key asset markets. The second-to-last sentence ("*We are agreed that excessive volatility and disorderly movements in exchange rates can have adverse implications for economic and financial stability")* falls firmly into the 'stating the obvious', category. The last sentence ("*We will continue to consult closely on exchange markets and cooperate as appropriate")* should probably be read as: 'And remember we are watching you. And 'you', means Japan, if you really want to know'.

The statement that *"… our fiscal and monetary policies have been and will remain oriented towards meeting our respective domestic objectives using domestic instruments, and that we will not target exchange rates"* is somewhere between Newspeak and gobbledygook. The gobbledygook probably in part reflects the tussle between the German and the French governments about the appropriate degree of interference by governments in foreign exchange markets, but that is unlikely to have been the only source of contention.[2]

[1] See also Buiter and Rahbari (2011)

[2] For instance, on February 5, French President Hollande stated that 'The euro should not fluctuate according to the mood of the markets' and 'A monetary zone must have an exchange rate policy. If not it will be subjected to an exchange rate that does not reflect the real state of the economy.' 'The eurozone must, through its heads of state and government, decide on a medium-term exchange rate'. German government spokesman Seibert quickly responded 'We are convinced that exchange rates reflect the economic fundamentals, especially flexible ones. We are open to a discussion with France about it, but the German government doesn't think that an exchange rate policy is an appropriate instrument to boost competitiveness. It may set some short-term impulses, but nothing sustainable.' See http://www.ft.com/intl/cms/s/0/5ffe511a-6f7e-11e2-956b-00144feab49a.html and http://euobserver.com/economic/118971

"*Domestic objectives*" could mean 'nationalistic objectives', that is objectives of national governments that only allow for the wellbeing of their own citizens. Or it could mean objectives of national governments that can be pursued by that government without any repercussions for the rest of the world. National objectives that can be pursued effectively without impacting the rest of the world are few and far between. A nation's monetary and fiscal policies will typically have consequences both for domestic residents and for the rest of the world. Another interpretation is that "domestic objectives" refers to what used to be called "internal balance" (full employment and price stability for a specific national or regional economy), with "external objectives" referring to 'external balance' (say, a sustainable current account balance or a competitive real exchange rate). But, of course, monetary policy affects both internal and external balance and so does fiscal policy.

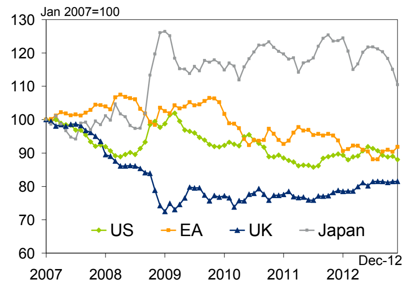
What are "*domestic instruments*"? This could mean instruments under the control of the domestic authorities, regardless of whether they impact only domestic residents and the domestic economy or in addition affect the rest of the world, through the exchange rate or other mechanisms. National monetary and fiscal policy fall into that category. Of course, if we tighten the definition to mean instruments under the control of the domestic authorities that in addition only influence domestic variables (GDP, employment, inflation) and do not have any impact on the nominal and real exchange rate, on external interest rates, external asset prices and foreign economic activity, that rules out national monetary and fiscal policy for sure.

Finally, the fact that G7 policy makers "*will not target exchange rates*" does not mean that their monetary and fiscal policy instruments will not have predictable, foreseeable, significant and lasting effect on nominal and real exchange rates.

Monetary policy makers are responsible for *all* foreseeable consequences or implications of their actions. Whether these consequences or implications are desired (or desirable), wanted or sought is irrelevant. Whether these consequences can be characterized as objectives (domestic or external/international) or as unintended and perhaps even undesirable external consequences, has no implications for whether the domestic authorities are responsible and should be accountable for these external consequences. If someone shouts 'fire' in a crowded theatre, with the objective of alerting those nearest to the fire extinguishers, that person is likely to be held responsible and accountable for the stampede that is likely to result.

Expansionary monetary policy weakens the currency

Figure 1. Selected Countries – Real Effective Exchange Rate (Jan-2007=100), 2007-2012.



Note: Lower values imply an appreciated real effective exchange rate.

Source: BIS and Citi Research

Expansionary monetary policy in an open economy with a floating exchange rate operates at least in part through a weakening of the currency

Expansionary monetary policy in an open economy with a floating exchange rate operates at least in part through a weakening of the currency.

This is true regardless of the degree of cross-border mobility of financial capital. The G7, of course, operate under conditions of virtually unrestricted international capital mobility. It is true whether or not monetary policy operates through the traditional channels of cuts in the official policy rate (often a target rate for the uncollateralized overnight interbank rate, like the Federal Funds Target Rate in the US, the fixed rate for the Main Refinancing Operations for the Eurozone, Bank Rate for the UK and the target for the uncollateralized overnight call rate in the case of Japan). Market beliefs about the future course of the official policy rate will often be an important driver of longer-term interest rates, and 'forward guidance' about likely future values of the official policy rate, or about the policy reaction function that is likely to govern the future setting of the official policy rate, can be an important policy instrument in its own right (see also Yellen (2011b)). Expansionary monetary policy also causes the effective (trade-weighted) exchange rate to depreciate, other things being equal, when the central bank engages in balance sheet expansion at a given official policy rate, say because that policy rate is stuck at and constrained by the zero lower bound or effective lower bound.[3]

Regardless of whether central bank balance sheet expansions take the form of quantitative easing (QE) or of credit easing (CE) or qualitative easing (called enhanced credit support by the ECB), they influence financial and real asset prices, the real economy, and/or wages and the prices of goods and services – and they will do so at least in part by weakening the currency.[4] If the central bank asset purchases take the form of outright purchases of foreign currency-denominated assets (effectively non-sterilised foreign exchange purchases), as has been advocated for Japan by Kazumasa Iwata (the President of the Japan Center for Economic Research and one candidate to succeed the current Bank of Japan Governor Masaaki Shirakawa when he retires on March 19), the weakening of the external value of the currency may be greater than if the same quantum of otherwise similar domestic currency-denominated instruments are purchased. But even if the central bank purchases only domestic currency-denominated assets, the external value of the currency will weaken, *ceteris paribus*. The only conditions under which expansionary monetary policy under market-determined exchange rates will fail to weaken the external value of the currency is when the economy is in a perfect liquidity trap, with interest rates at all maturities at their effective lower bounds. Under these conditions, of course, expansionary monetary policy has no effect on anything – domestic or external, real or nominal.

[3] Once the official policy rate is at the effective lower bound for nominal interest rates, the liability side of the central bank's balance sheet becomes irrelevant. Whether the asset purchases or loans by the central bank are monetized or sterilized (through the issuance of non-monetary liabilities like term deposits, central bank bills or central bank bonds) will not influence the effectiveness (or lack of it) of the central bank's asset purchases or lending operations.

[4] By QE we mean outright purchases of securities or collateralised loans that don't change the average liquidity or creditworthiness of the assets held by the central bank. Credit easing (CE) or qualitative easing (called enhanced credit support by the ECB) is to be understood here as balance sheet expansions or changes in the composition of the assets of the central bank that reduce the average liquidity and creditworthiness of the central bank's assets, if these actions are effective.

Cet. Par.

The '*ceteris paribus*' qualification applies also to the exchange rate implications of monetary policy

Economists get a lot of stick for starting every other sentence with the words "*ceteris paribus*" or "other things being equal". This particular bit of stick is undeserved. It is both true that other things are never equal in the real world and that it is extremely important to precede every statement about the likely consequences of a policy action, shock or other exogenous event with the words: other things being equal. Such counterfactual policy analyses should not be confused with unconditional forecasts. Precision is not evasion.

Expansionary monetary policy can be 'beggar-thy-neighbour'

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Under empirically relevant conditions for the G7, expansionary monetary policy in, say, Japan, boosts domestic demand (that is, demand by domestic residents or 'absorption', the sum of public spending on goods and services, private domestic investment and private domestic consumption) and reduces the trade balance deficit (or increases the trade balance surplus). To the extent that domestic interest rates at a significant range of maturities are lowered and domestic financial asset prices are boosted, the increase in domestic demand can be larger than the increase in domestic demand for domestically produced goods and services. In that case, some of the increase in domestic demand spills over into increased demand for imports from the rest of the world. This mitigates the adverse effect on activity in the rest of the world of the increase in Japan's external trade surplus (and the matching increase in the rest of the world's trade deficit brought about by the weakening of the effective exchange rate of the yen caused by expansionary monetary policy in Japan). But as long as transmission to the rest of the world is only through the exchange rate, expansionary monetary policy in one country is always beggar-thy-neighbour for the rest of the world.

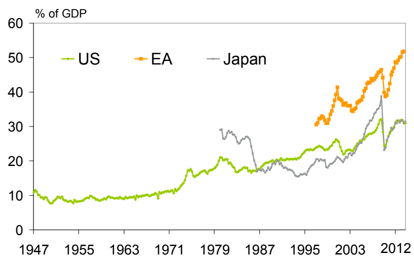
Policy responses abroad or asset prices domestically or abroad may outweigh the contractionary effects of expansionary monetary policy on the rest of the world

Of course, interest rates in the rest of the world may be lowered and financial and real asset prices boosted by the expansionary monetary policy action in one country, even if monetary policy makers in the rest of the world do not respond to the expansionary policy in Japan. This is more likely the larger the weight in global financial markets of the country engaged in expansionary monetary policy. If the reaction functions of foreign monetary policy makers cause them to cut the official policy rate or engage in QE or CE when expansionary foreign monetary policy drives down foreign interest rates and strengthens the external value of their currency, the likelihood increases that the total impact of an expansionary monetary policy action in Japan, say, will benefit global economic activity.

Empirically, the jury is out on whether, *ceteris paribus*, expansionary monetary policy in the US, say, weakens economic activity outside the US. It is almost certain to boost global activity. It is, however, definitely possible that the boost provided by lower interest rates and a weaker US dollar to US activity exceeds the increase in global activity, and that the rest of the world is hurt more by the deterioration in its trade balance than it benefits from the other external transmission channels of US monetary policy. A lot depends on the details of the policy experiment and the assumed response of foreign policy makers.

The response to the rhetorical question asked by US officials on a number of occasions, which can be paraphrased as, 'would the rest of the world really prefer a stronger US dollar and a weaker US economy over a weaker US dollar and a stronger US economy?' can therefore only be: 'we're not too sure' (see e.g. Bernanke (2012, and Yellen (2011a)). Yellen (2011a) recognizes explicitly that whether expansionary US monetary policy is beggar-thy-neighbour or foreign

Figure 2. Selected Countries – Trade Openness (% of GDP), 1947-2012



Note: Trade openness defined as sum of exports and imports of goods and services divided by GDP. EA values exclude intra-EA trade.
Source: National Sources and Citi Research

Exchange rates are affected by relative monetary policy stances

Most major central banks have recently engaged in very loose monetary policy, limiting the effects on exchange rates

economic activity promoting is an empirical matter. The empirical issue of whether the external 'locomotive' effect of expansionary monetary policy dominates its beggar-thy-neighbour exchange rate effect remains unresolved.[5]

The answer may not be very different for the US from what it is for Japan, as the trade openness of the US and Japanese economies (as measured by imports plus exports of goods and services as a percentage of GDP) has become rather similar in recent years, at around 31 percent of GDP. This is shown in Figure 2, together with the more recent data on the euro area (EA).

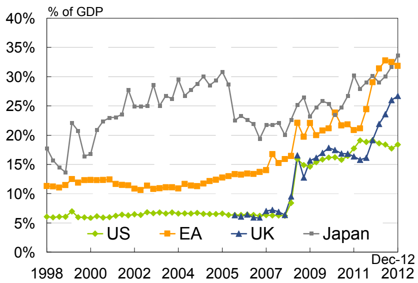
Why does QE/CE not show up more in exchange rate behaviour?

The reason is simple: everyone is doing it. Since the Fed started to engage in large-scale CE in late November 2008 (purchasing $600bn in mortgage-backed and agency securities) and in large-scale QE in August 2010 and again in September 2012, most of the issuers of the other significant global currencies have imitated and emulated the Fed (see Yellen (2011a)). The Bank of England engaged first in CE (through the Special Liquidity Scheme announced on October 8, 2008) and then in QE (on an even larger scale as a share of GDP than the Fed). The ECB, too, has engaged in aggressive balance sheet expansion, mainly through CE, both in the form of outright purchases of euro area periphery sovereign debt through the Securities Market Programme (SMP) and through the extension of large amounts of loans to counterparties of frequently doubtful solvency against collateral often issued by governments of doubtful solvency, as with the LTROs. Japan, in contrast, engaged in much smaller-scale QE and CE.

The huge injections of liquidity by the Fed, the ECB and the Bank of England and the more modest balance sheet expansion by the Bank of Japan showed up in the prices of most liquid financial assets (and in commodity prices) but not in the effective exchange rates of the US dollar, the euro and sterling, although there was a steady appreciation of the yen, which only reversed when the new Japanese government at the end of 2012 began to put material pressure on the Bank of Japan to implement a significant relaxation of monetary policy. Emerging markets also relaxed monetary policy when confronted with the wall of advanced economy liquidity coming their way, in an attempt to limit the appreciation of their currencies.

[5] "Finally, any costs for emerging market economies of monetary easing in advanced economies should be set against the very real benefits of those policies. The slowing of growth in the emerging markets this year in large part reflects their decelerating exports to the United States, Europe, and other advanced economies. Therefore, monetary easing that supports the recovery in the advanced economies should stimulate trade and boost growth in emerging market economies as well." (Bernanke (2012)); also "To conclude, the Federal Reserve is providing additional monetary accommodation to achieve its dual mandate of maximum employment and price stability. This policy not only helps strengthen the U.S. economic recovery, but by boosting U.S. spending and growth, it has the effect of helping support the global economy as well". Bernanke (2012)); and "Finally, I would like to comment on the critique that our asset purchase program is meant to promote U.S. growth at the expense of other nations by depreciating the dollar and enhancing U.S. competitiveness. That argument ignores the fact that stimulating growth in the United States is also likely to boost our demand for foreign goods and promote growth abroad. This effect will provide an important offset to the other implication of U.S. monetary stimulus that I discussed earlier--that it may lead to moderate movements in the foreign exchange value of the dollar that tend to lower U.S. demand for foreign goods", (Yellen (2011a)).

Figure 3. Selected Countries – National Central Bank Balance Sheet (% of GDP), 1998-2012



Source: National Central Banks and Citi Research

The monetary drivers of bilateral or effective exchange rates are always the *relative* stances of monetary policy in the countries involved. With Japan likely to adopt in the future a significantly more expansionary monetary policy than in the past, the beggar-thy-neighbour impact on Japan of QE and CE in the US, the UK and the euro area will likely be mitigated or reversed completely. With the ECB now pursuing the relative tightest monetary policy among the FED, ECB, Bank of Japan and Bank of England quartet, we can expect the euro to be the leading appreciating currency.

It is clear that Japan is unlikely to get scolded in public about its more expansionary monetary policy by nations or regions in the developed world with an independent currency and monetary policy. After all, they are only just beginning to do what the US, the UK and the ECB have been doing for years. The fact that the US, the UK and the ECB don't go on the record as seeking to weaken their currencies through expansionary monetary policy does not alter the reality that a weaker currency is a key and inevitable part of the transmission mechanism of more expansionary monetary policy when the exchange rate is market determined. The Fed and the ECB may not like this feature of the transmission mechanism. They may prefer to live in a world where there is no exchange rate. Unfortunately for them, this in not the world the Fed, the ECB and the Bank of England or anyone else lives in. Only the world as a whole has no exchange rate.

Of course, Japan was never likely to avoid scolding by those increasingly confident major emerging market countries with largely market-determined exchange rates, such as Brazil and Russia. The high level of official foreign currency reserves of these countries and a number of administrative and fiscal restrictions to capital mobility illustrate that even these countries do not wholly leave the determination of their exchange rates to the market. Of course, many other EM countries have long engaged in much more overt forms of exchange rate management. Those countries, notably China, may not complain about the direct exchange rate implications of the extraordinary liquidity creation of AE central banks, but rather the implications for price stability and financial stability of the 'Wall of Money' in their countries.

Japan may from now on avoid using open-mouth operations to weaken its currency

Japan may, to respect fundamentally irrelevant diplomatic niceties, not present its future monetary policy as designed to weaken the yen to boost net exports and economic activity. Using 'open mouth operations' would strengthen the effect of monetary policy on the exchange rate if those statements are a rhetorical expression of a commitment to pursue policy actions that would drive the currency in the desired direction, in the spirit of 'forward guidance' for exchange rate policy.[6] But more expansionary Japanese monetary policy will inevitably work in part through its effect on exchange rates in any case, if it is effective. The good news for the rest of the world is that Japan proposes to combine its more expansionary monetary policy with a fiscal stimulus of some 10 trillion yen. Expansionary fiscal policy, holding constant the stance of current and expected future monetary policy, in a world with a market-determined exchange rate and a high degree of international capital mobility, will strengthen the external value of the currency and cause a decline in Japan's trade surplus. This assumes that the fiscal stimulus does not create market doubts about the solvency of the sovereign. It is therefore possible that, as long as Japan combines its monetary stimulus with a fiscal boost, there will be little impact on the external value of the yen. Global economic activity

[6] The reverse also applies. If statements regarding the exchange rate are merely 'cheap talk' and not backed up by policy action that would support the announced intention, open-mouth operations may still initially move exchange rates in the desired direction, but that would be akin to a 'foreign exchange bubble' which would eventually burst.

would be boosted, and both Japan and its trading partners could experience higher levels of activity, driven by domestic demand in Japan and by external demand in the rest of the world. And this could happen even without a further G7 communique.

Perhaps the most important lasting consequences of the expansionary monetary policies pursued by the advanced economies are not going to come through the conventional monetary policy transmission mechanisms at all. Instead they are likely to be the by-product of the extraordinarily low safe nominal and real rates of interest throughout the world (especially in the advanced economies) and the unprecedented amounts of liquidity provided by the leading advanced economy central banks. While recognising the contribution made to mitigating the consequences for output and employment of the North Atlantic financial crisis, we think it is likely that there will be a future price to pay because of the misallocation of credit and capital encouraged by these ultra-low safe rates of interest and the near-unlimited availability of central bank liquidity to the banking sector and the shadow banking sector. There is evidence of an increasingly frantic search for yield driven by the low level of safe yields which encourages growing numbers of investors to take on more risk than would have been deemed acceptable even during the boom years before the crisis. Some of this excess liquidity is showing up as incipient credit and asset market booms and bubbles in Emerging Markets. And where boom and bubble lead, bust soon follows.

Rather than worrying about the exchange rate impacts of expansionary monetary policy, conventional and/or unconventional, the G7 and G20 should focus on better macro-prudential and microprudential oversight and more effective controls to avoid the emergence of new asset and credit booms and bubbles before the world has even recovered from the last bust.

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Appendix A-1

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