

Country Code	ISO	WFO	Subject Code	Country	Subject	Units	Scale
192	AFG	AF	NY	Afghanistan	Gross domestic product, constant prices	Expressed in billions of national currency	1000000000000.0
193	AGO	AO	NY	Angola	Gross domestic product, constant prices	Expressed in billions of national currency	1000000000000.0
194	ALB	AL	NY	Albania	Gross domestic product, constant prices	Expressed in billions of national currency	1000000000000.0
195	DZA	DZ	NY	Algeria	Gross domestic product, constant prices	Expressed in billions of national currency	1000000000000.0
196	AND	AD	NY	Andorra	Gross domestic product, constant prices	Expressed in billions of national currency	1000000000000.0
197	ARG	AR	NY	Argentina	Gross domestic product, constant prices	Expressed in billions of national currency	1000000000000.0
198	ARM	AM	NY	Armenia	Gross domestic product, constant prices	Expressed in billions of national currency	1000000000000.0
199	AUS	AU	NY	Australia	Gross domestic product, constant prices	Expressed in billions of national currency	1000000000000.0
200	AUT	AT	NY	Austria	Gross domestic product, constant prices	Expressed in billions of national currency	1000000000000.0
201	BEL	BE	NY	Belgium	Gross domestic product, constant prices	Expressed in billions of national currency	1000000000000.0
202	BEN	BJ	NY	Benin	Gross domestic product, constant prices	Expressed in billions of national currency	1000000000000.0
203	BGR	BG	NY	Bulgaria	Gross domestic product, constant prices	Expressed in billions of national currency	1000000000000.0
204	BHR	BH	NY	Bahrain	Gross domestic product, constant prices	Expressed in billions of national currency	1000000000000.0
205	BIH	BA	NY	Bosnia and Herzegovina	Gross domestic product, constant prices	Expressed in billions of national currency	1000000000000.0
206	BOL	BO	NY	Bolivia	Gross domestic product, constant prices	Expressed in billions of national currency	1000000000000.0
207	BRA	BR	NY	Brazil	Gross domestic product, constant prices	Expressed in billions of national currency	1000000000000.0
208	BUR	BD	NY	Burkina Faso	Gross domestic product, constant prices	Expressed in billions of national currency	1000000000000.0
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QE is Past its Due Date

Lars J. Pedersen

August 1, 2016

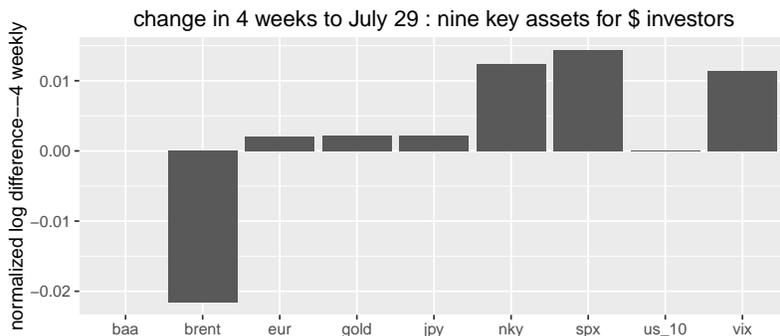
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- **Brexit is no Grexit**
- **End of the US inventory cycle**
- **European banks—escaping another trap**
- **Japan explores helicopters**

Asset values have rebounded from the shock of Brexit. Some damage is expected for the UK, but not enough to trip the global economy into recession. But, just to be sure, one more dose of policy-induced asset inflation seems like a reasonable insurance policy. Equities, particularly, were up in both the core and emerging markets.

Oil prices fell sharply. US drilling picked up, and the promise of more to come implies that \$50/bbl is too high to hold down US production for long. Steadily rising Iraqi and Iranian production is another factor pushing down market prices.

Lastly, the yen rose sharply at month-end (not shown below), on disappointment with a limited new program of quantitative ease in Japan. Investors were not sure what exactly could be done but had placed bets on asset values anyway on the basis that whatever it was, it would be helpful.



As fear of the most damaging outcomes from Brexit ebbed out of global markets, investors were left to profit from the assumed reaction of central banks. All involved assumed any new precautionary ease would work through higher asset values. For this reason, the absence of a decisive new Japanese monetary policy push when expected was

off-putting. Foreign exchange markets have been taking up much of the burden of adjustment to recent shocks. The pound fell after Brexit, as did the Turkish lira after the coup flop. And the absence of a strong policy move in Japan, where past QE has led to depreciation, caused a sharp rise in the yen.

End of the US inventory cycle. US growth was disappointing in the second quarter. Revised estimates now clearly show a long inventory adjustment that has held back headline GDP to under 1% for the last three quarters. The good news is that we now have a very good chance that the inventory adjustment is over, to be followed by rebuilding. If underlying demand growth is around 2%, this reversal could add about 1% to underlying demand to yield over 3% growth in the second half, a potential surprise to investors who are not students of inventory mechanics. (See chart below, left.)

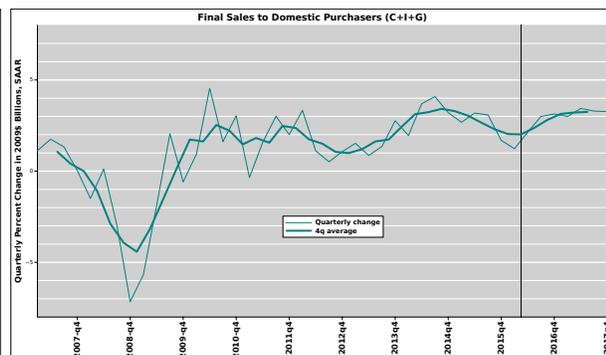
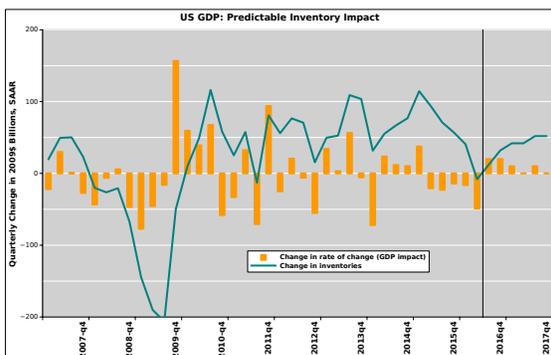
American consumers came back strongly in the second quarter: the only question is how these gains will be sustained. Car sales seem to have plateaued at a high level, but health care and other service spending are buoyant. This service-side spending is more than half of the total now and far less prone to being met by imports than goods are. Still, I remain struck by how hard the drop in asset values hit consumption in the first quarter. Second quarter gains look like a catch-up for lost sales in the first, and not a prediction of continued similar gains. Are we hooked on ever-higher asset values to keep up the recovery?

Some weakness in the second quarter is apparent even in final demand. Investment spending has been held back by a collapse in the oil belt, but investment there can only fall to zero and we are close to that already. Home construction paused, but that seems unlikely to continue. As the number of existing homes for sale is thinning out, and prices are rising, that should bring on the alternative of fresh construction. On balance, final demand has been growing at about a 2% rate, down from 3%

in early 2015. A return to 3% final demand growth after the oil patch recession, and housing picks up, is very possible. (See chart below, right.)

Should we run into a growth problem, which I find unlikely but not impossible, the Fed must be asking what its response can be. Unwanted side effects of its policy of driving up asset values through quantitative ease are becoming increasingly apparent. One is over-extended asset prices that are vulnerable to sudden drops. Another is how an asset-centered approach *increases inequality*. Plainly, boosting asset values must work almost exclusively via wealth gains for the already wealthy. Voters left behind sense their exclusion and have voted against the status quo in the UK, France and Italy and, to a surprising extent, in the US. Asset-centered policies cannot be stable, and it will only a matter of time before these policies will have to be replaced by something more sustainable, probably fiscal policy.

If, on the other hand, growth clicks in nicely in the second half of the year, which I find more likely, what should the Fed do then? Moving interest rates back toward normal would be the simple answer, but the Fed is increasingly constrained by weak demand off-shore. One index of that constraint is how deflation abroad combines with a strong dollar to produce falling non-oil import prices. These come up in Fed commentary with increasing frequency and automatically raise real interest rates and so limit the speed and scale of potential tightening even in a surprisingly strong growth environment. Tightening, if needed, might come *automatically*.



European banks—again. Europe staggers from crisis to crisis. Last month Brexit, this month Italian banks. On Brexit, polls seem to show that rolling back decades of institutional convergence can indeed frighten companies and investors. Each will have reason to pause and collect information before spending discretionary funds. The result could be a sharp drop in business and real estate investment. But it is only a *demand* shock since the currency has long floated and bank credit for good borrowers remains available. This is completely different from Greece where the possibility of an exit from the euro meant sudden large currency moves compared to zero, and where sovereign debt default suddenly became plausible. Brexit is not Grexit in its financial impact across asset markets.

In its very useful analysis of Brexit risks the Bank of England did find one channel of potential risk, in commercial real estate. Here global and local investors have been deploying borrowed funds to bid up assets yielding an attractive return compared to long term funding. A shock here could create strains on the different balance sheets involved, including open-ended mutual funds, some of which have closed to buy time to sell their underlying commercial real estate assets. But it seems a second-order event for now.

No sooner has the Brexit shock begun to dissipate, but we encounter concerns about Italian bank loan quality. This was somewhat overlooked in early stress-tests, which were absorbed with the transmission of bond and equity portfolio losses and on resulting cross-border funding strains. Defaulting borrowers in Italy after a long recession that is only just turning around are another matter. Here

Japan explores helicopters. Japan's policy is now struggling to keep a tentative recovery on track. Several factors, including weak growth combined with low oil prices combined to trip the nation back into deflation in June. A failure to get inflationary ignition despite highly publicized efforts is frightening policy makers who are forced to examine new options.

regulators, influenced by political pressures, seem to have been overly optimistic about business and bank recoveries that would absorb the losses. After European banking rules required initial losses to fall on bank capital, and the politically toxic example of how that worked in late 2015 for retail bond buyers in Italy, the system fell into a trap. Exiting this trap after the European Banking Authority stress test results last weekend will stretch the imagination of bureaucrats, but I am sure they can find a way to recognize losses without harming retail depositors or Italy's net national debt, or forcing a crash round of asset sales at depressed prices. And so it seems this morning.

Meanwhile, underlying business conditions are steadily improving in Europe. GDP has been expanding smoothly, jobs are created, and with super-low inflation that is turning into hefty real income gains not seen in nearly a decade. We are even seeing early signs of inflation picking up in Germany, an enormously stabilizing event because it allows relative prices to fall in Italy and others without painful outright deflation. Enabling all this to happen has been a steady improvement in credit growth, even in Italy and Greece, as banks are again able to extend new loans, some funded at extremely cheap terms with the TLTRO facility of the ECB.

And no one is really going to enforce fiscal austerity in Europe any longer. A shadow-play of EU proposed fines for Spanish and Portuguese ended with an inevitable reprieve as the entire logic of global stabilization is turning to fiscal policy over monetary policy after years of over-reliance on money and asset-inflation. Even in Europe.

The Bank of Japan may well be worried. Ahead of the rest of the industrial world it invented quantitative ease, ballooning its balance sheet further than others in the search for inflation. Surely at some level of money growth, the argument ran, inflation would turn up because there would be more money for the same goods. If inflation turns up, zero nominal rates will become negative in

real terms, making investment attractive—as long as earnings expectations had not fallen even faster in the meantime. But money supply is not leading to inflation for Japan. What if this is warning us all that it is harder than you think to exit from deflation with an aging society in the aftermath of a financial bubble? If so, it is not just Japan that is in trouble.

For me, Japan is a leading indicator of how quantitative ease can fail. But that leaves Japan and all of us with options: can we widen quantitative ease to buy new assets besides government bonds? Other assets can include corporate bonds and baskets of stocks, both of which the BOJ decided to buy more of this month. Ultimately this will socialize financial markets with unpredictable political consequences. Buying could also turn to foreign exchange, which would perhaps be the most effective short-term policy, but one that is clearly zero-sum for the world system. Japan's gain by devaluation is another country's loss by appreciation. Because competitive devaluations were a major disruptive force during the great depression, global policy makers all frown on this kind of asset buying and it cannot work as a general policy.

If quantitative ease by asset buying is reaching its limits, to what extent can we instead simply lower policy rates into deeply negative territory? At the ECB, reflecting the supposedly painless experience of Denmark and Switzerland, a doctrine

emerged that negative rates could eventually be pulled down below deflationary expectations to create negative real rates to attractive investment. This approach has a problem: nominal interest rates cannot go too far below zero before banks run into trouble with their increasingly expensive deposits, which yield absolute zero. The higher the deposits in the system, and they are very high in Japan, the greater the tax on banks. European banks are showing the consequences of this dead end, as well.

That leaves Japanese policy, obviously fearful of going down one more time into a deflation cycle, to widen its search for new policies. Particularly tough, but perhaps inevitable, will be a fresh consideration of fiscal policy. Supported by full central bank buying of any additional debt required, this can certainly boost spending in Japan immediately. Finding local projects that have long-term value could be the biggest problem with this approach. It could also be a challenge to explain why the nation can afford to abort the Abe administration's long-term search for higher taxes and smaller fiscal deficits. One way to mitigate concerns might be to issue zero coupon infinite duration bonds with zero repayment burden. An all-cash financing of public spending without consequences could make the policy more palatable. This, then, is the sense in which "helicopter money" is coming to Japan. And maybe, in time, elsewhere.

Our look at global conditions shows a renewed global recession is possible but unlikely. Even so, markets have been working through the expected impact of one more dose of quantitative ease taken out as official insurance to offset US inventory, European Brexit, and Japanese deflation shocks. This latest dose is expected to mostly work through higher asset values, one more time.

But looking a little further ahead, we have several reasons to believe that any new speed-bumps on the way to global recovery will increasingly meet fiscal policy instead of a new round of higher asset values. As I outlined above, the experience with exclusive dependence on asset price inflation, including its increasingly obvious costs and declining impact, is likely to give way to fiscal spending at zero interest rate costs. Japan leads the way.

Not yet, but in time, this pivot to a zero-cost fiscal policy can be effective. If so, and it does finally reignite inflation, that will bring us back to the problem of asset valuations at more nearly normal discount factors. When that moment comes, it is bound to be a rocky adjustment for asset prices, even in a deceptively buoyant economic climate.