Dieter Wermuth's Investment Outlook

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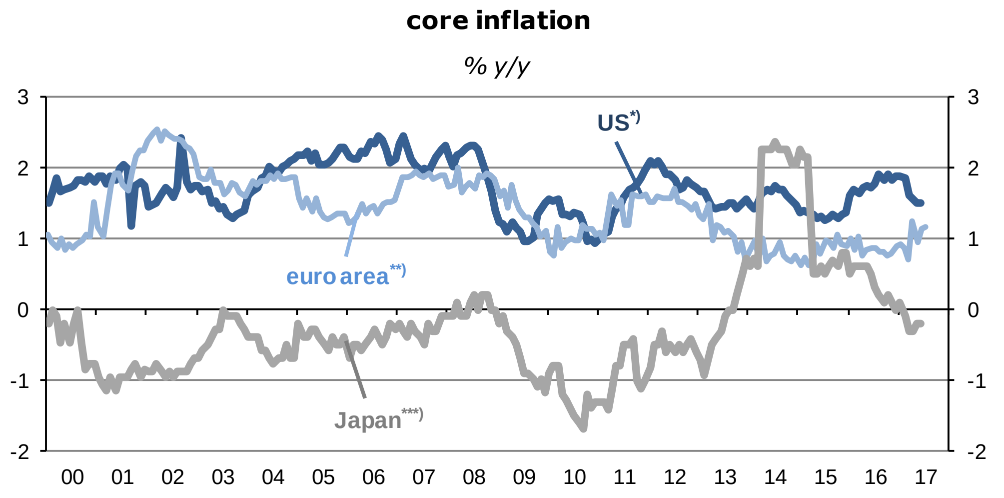
Stock markets move closer to a major correction

1. **Since December 2015, the American central bank tries to normalize policies, but has only succeeded to raise the policy rate from 0.1% to 1.16% so far**. It remains well below the so-called neutral rate of roughly 3%. The large difference between the two rates implies that U.S. monetary policies are very accommodative. A booming stock market, easy credit conditions and the recent dollar weakness have amplified the stimulus. **Monetary conditions remain very easy.**

2. **Why doesn't the Fed tighten more rapidly?** After all, the economy has expanded for eight years by now, full employment has been achieved and real GDP growth is a robust 2½ percent. **The main reason is subdued wage and consumer price inflation**, in particular core inflation which is 1½ percent and falling. The target headline rate is 2 percent.



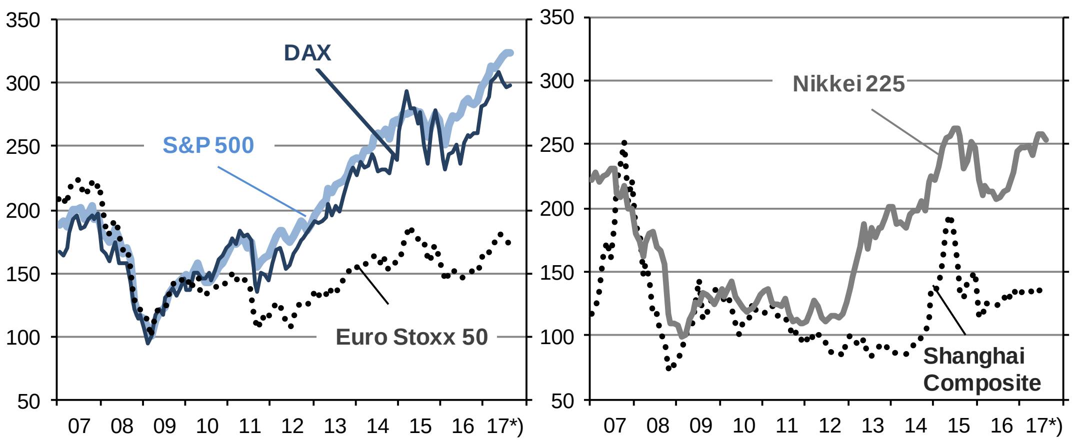
*) price index for personal consumption expenditures excluding food and energy – **) HICP excluding energy, food, alcohol and tobacco – ***) CPI excluding food and energy

sources: Federal Reserve, ECB, MIAC

3. This reminds me of the goldilocks environments of the Greenspan and Bernanke years. At the time, the central bankers hesitated to take away the punch bowl when (almost) everybody was happy with things as they were, including strong growth, low inflation and booming stock markets? It could not last. March 2000 and September 2007 marked the end of the two previous stock market rallies. They were followed by corrections of the S&P 500 by 46 and 48 percent, respectively. Both stock market parties thus ended in tears. The current rally began in March 2009 and has driven the index up by no less than 224 percent since. **A repeat of the large corrections seen in the past gets likelier by the day.**

major stock indices

March 2009 =100



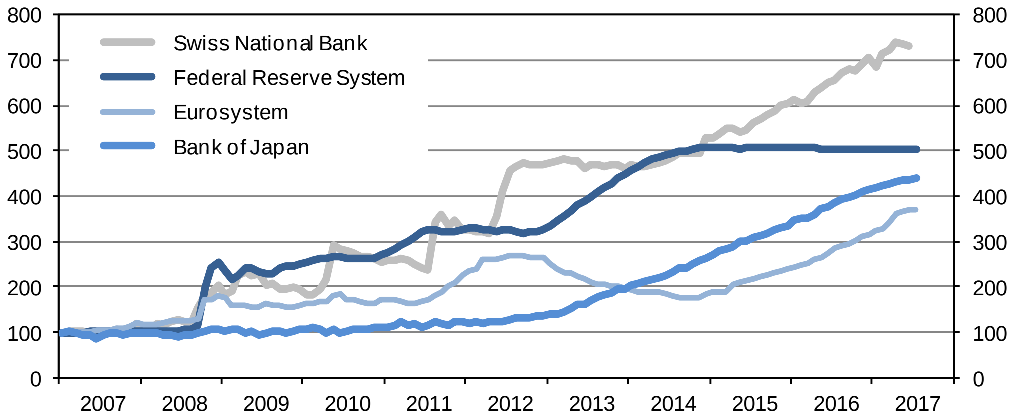
*) last value: August 2017

sources: ECB, Deutsche Bundesbank, Handelsblatt; own calculations

4. **At the European end, the ECB tries cautiously to prepare markets for a tapering of quantitative easing, ie, an end to bond purchases, and, later, for higher interest rates.** But in spite of robust employment growth, both wages and consumer prices continue to rise only very slowly. Since target inflation will not be reached anytime soon, t**here is not much pressure to tighten the screws.** As in the U.S., policy rates are significantly lower than neutral and thus provide an incentive to move funds into financial assets, both stocks and bonds. The deposit rate at the ECB is at -0.4% and the main refinancing rate at 0%.

central bank balance sheets*)

Jan 2007 = 100



*) total assets; last value: July 2017 (SNB June 2017)

sources: Federal Reserve, ECB, SNB, Bank of Japan; own calculations

5. The central bank has also been held back from tightening policies by the strength of the euro this year. On the basis of sound fundamentals, it is not unlikely that the appreciation will continue. Since the euro area is very exposed to international trade, much more than the U.S., for instance, the **deflationary effect of the rising exchange rate** is large. So the ECB keeps pumping liquidity into the banking sector at a time when, by most yardsticks, European financial assets are already dangerously overvalued, at least from a historical perspective.

6. **The ECB will continue to tread carefully for two other reasons: unemployment is still very high, and government finances are still a long way from being sound again, despite recent improvements.** Germany is the major exception in both respects. Low interest rates make investments in real assets such as machinery and housing relatively attractive and thus support demand and supply, real GDP growth and employment. At the same time, low borrowing costs help to reduce the burden of servicing public sector debt. The longer rates remain subdued, the better prepared will governments be when the next financial crisis hits. Without the helping hand of the ECB, budget deficits and relative debt levels would not have come down so rapidly.

why inflation refuses to accelerate

7. It has become a major topic among economists and policy makers to deplore the **new disconnect between employment and GDP growth on the one hand and wages and inflation on the other.** Why doesn't a buoyant economy, combined with aggressive money printing, lead to rising inflation? What can be done?

8. **For me, the most plausible explanation is that advanced economies are still operating significantly below potential output.** I do not believe that annual real GDP trend growth has suddenly slowed from 2½ percent before the financial crisis to perhaps 1¼ percent since, given the deluge of new products and processes which are coming to the market all the time. Can anybody seriously argue that technical progress and productivity growth have more or less stopped and that growth is now generated exclusively by additional labor?

9. This means I do not buy the argument that the rich countries are operating near full employment. For the OECD, the difference between actual and potential GDP of the advanced economies is supposed to be just 0.8 percent this year, and 0.3 percent in 2018. **If this were true, it should be fairly easy for workers to get higher wages, and for companies to charge higher prices. We do not see this.**

10. **Another explanation for sticky sub-target inflation has to do with the international division of labor.** Borders are increasingly porous for goods and services from abroad; thanks to the internet, the information about foreign markets gets better and better; and the cost of long-haul transportation continues to fall: there are now container ships which carry up to 15,000 units, and operate with a very small crew of cheap Philippine sailors. In other words, the world is developing into one big market place where workers in China and Vietnam are in direct competition with their French, German and American colleagues.

11. **As long as the wage gap between countries remains wide, and as long as borders stay open, wage inflation in the OECD will remain subdued, and thus inflation, almost independently of monetary policies.** Only when unit labor costs have become comparable

internationally will it be possible to negotiate larger wage hikes again. It will probably take decades.

12. The line we hear from both the ECB and the Fed is that the usual trade-off between real growth and inflation will prevail in the end, it just takes longer than expected: be patient, our recipes will work. But **let's assume the two counter-arguments above are valid. Investors would then have to prepare for a long period of very low wage and consumer price inflation, accompanied by historically low policy and market interest rates.** My standard analysis of stock and bond markets would be worthless – since real long-term interest rates will be extremely low for many years to come, stock markets are not overvalued but cheap, while bond yields are about right. It's the "this time is different" argument once again. The reasoning may make sense, but my gut feeling is that the risk of another major financial crisis continues to increase.

a close look at stock market valuations

13. Let's start with the traditional market analysis by looking at the usual stock market indicators. Under the assumption that central banks are right about the eventual return of inflation and rising policy rates, they suggest that **investors should get out before everybody else does**.

global stock market indicators

market	av. ann. increase: Mar 6, '09 – Aug 24, '17 %	p/e ratio, based on		risk premium, based on		price-to-book	divi-dend yield %
		actual earnings	current year estimates	actual earnings	curr. year estimates		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
S&P 500[1)]	16.3	20.9	18.7	4.3	4.9	3.1	2.0
EuroStoxx 50	7.6	17.7	14.7	6.3	7.4	1.6	3.4
FTSE 100[2)]	7.8	25.1	15.2	5.5	8.1	1.9	4.2
SMI[3)]	9.0	24.0	17.9	4.7	6.1	2.6	3.3
DAX	15.2	17.0	13.4	7.2	8.8	1.8	2.8
CAC 40[4)]	8.7	16.9	15.1	5.9	6.6	1.6	3.2
FTSE MIB[5)]	6.4	neg.	15.0	n.a.	5.8	1.2	3.0
IBEX 35[6)]	4.9	16.0	14.6	6.0	6.6	1.5	4.0
Nikkei 225[7)]	12.5	17.5	16.7	6.1	6.4	1.7	1.8
CSI 300[8)]	6.4	17.5	14.5	3.5	4.7	1.8	1.9

1) USA – 2) UK – 3) Switzerland – 4) France – 5) Italy – 6) Spain – 7) Japan – 8) China
sources: Bloomberg, own calculations

14. **Since March 6, 2009, the last low point of most stock indices and the darkest hour of the Great Recession, recoveries have been very different.** American and German markets have done best over the whole period of eight years and 167 days, with average annual growth rates of more than 15 percent. Japan is a runner-up, at 12.5 percent. Such a pace is clearly not sustainable. To make the point: we just learned from Germany's new national accounts data that corporate earnings and other income from capital had increased at an average

annual rate of just 4.1 percent during the 8½ years covered in the table, ie, by significantly less than the 15.2 percent of the DAX, the country's main stock index. German stock prices, just as American and Japanese ones, have lost touch with corporate earnings.

15. As a general rule, markets that have performed very well in the past are unlikely to be the future winners. **Hands off expensive assets!** Investors should rather increase the weight of neglected markets such as Spain, Italy and China (column 2 in the table).

16. Next in line **as valuation yardsticks** are **price-to-earnings ratios**. On the basis of published corporate earnings, only Italy had been in the red last year. This is about to change, though. The most expensive markets are Britain, Switzerland and the U.S. – while the others are cheaper, none of them is cheap in absolute terms. Attractive stock markets should trade at p/e ratios of less than 15. Could these heady valuations be a sign that a general stock market crash or a major correction are coming? Probably (column 3).

17. As always, **analysts predict that corporate earnings will rise briskly**. This can be derived from the difference in the p/e ratios on the basis of actual and expected earnings. Keep in mind that the economic recovery and the stock market rally are long in the tooth by now. They are kept going by accommodative monetary policies and have somehow lost touch with fundamentals.

18. In any case, **Germany looks cheapest when calculations use expected earnings** – but the implication of a p/e ratio of 13.4, following 17.0, is that per-share earnings will exceed last year's by no less than 32 percent. While the country's economy is presently growing at a healthy annualized rate of 2½ percent, such an explosion of profits is simply not in the cards; it would imply another massive redistribution of national income in favor of capital. The most expensive markets on expected earnings are the U.S., Switzerland and Japan (column 4).

19. Stock prices must always be compared to the prices of alternative assets. They may be expensive, but bonds or real estate may be even more expensive. A measure that compares the relative prices of stocks and supposedly riskless assets, typically long-term government bonds, is the so-called risk premium. The higher it is the better protected are stocks against setbacks. **Traditionally, risk premia of stocks used to be in the range of 4 to 6 percentage points, but as a look at the numbers in columns 5 and 6 shows, only American and Chinese equities are in this range, ie, expensive, all others are significantly above and thus attractively priced.**

20. The risk premia partly reflect the fact that real government bond yields – which serve as a yardstick – are either very low, or negative (UK, Germany, euro area, Switzerland and Japan). **Germany is once again the best buy of the lot.** In general, compared to bonds, equities are not overpriced, most of them are actually quite cheap.

21. Another tool of traditional stock market analysis is the price-to-book ratio. The higher it is the more a market is characterized by hype. In this respect the U.S. is in a class of its own (column 7). The tech companies are the darlings of investors and sport stratospheric p/b ratios: Alphabet 4.4, Facebook 7.3, Microsoft 7.7, Tesla 11.6, Amazon 19.6. They reflect expectations of market dominance and rapid long-term growth. Only Swiss stocks come near in this respect. **European stock markets in general are regarded by investors with more**

skepticism, with p/b ratios between 1 and 2. Italian and Spanish stocks are cheapest: sell America, buy Italy and Spain.

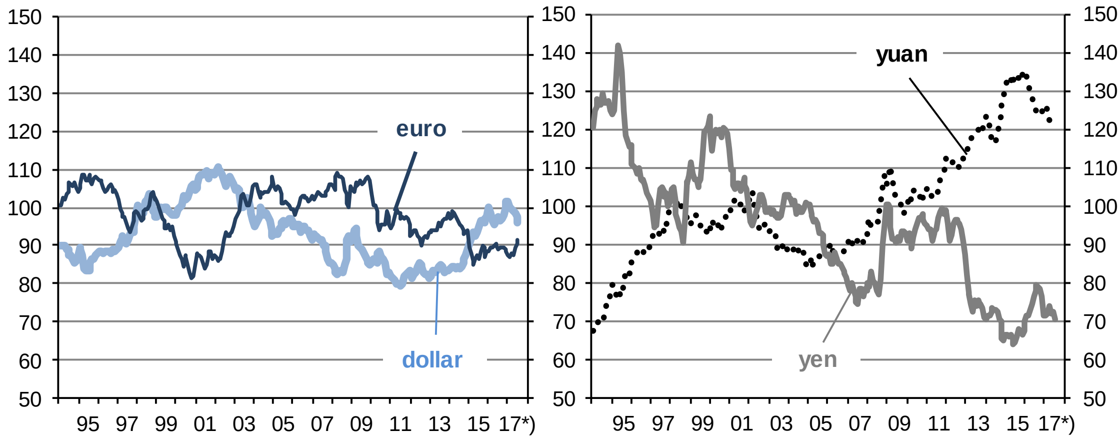
22. Finally, in column 8, the average **dividend yield of stock markets**. **With the exception of the U.S. and China, they are considerably higher than nominal long-term government bond yields and thus attractive investments from a cash flow perspective**. High and steady payouts are a sign that the underlying business is well established and solid. Dividend stocks are ideally suited for investors who have long-term obligations or want to create nest eggs for old age. Issuers of such equities actually often try to raise dividends over time (something that does not happen to bonds); and they want to maintain their status as providers of safe assets for widows and orphans. Another of their goals is therefore to avoid any reduction of dividends. To skip dividends altogether would hurt their reputation even more which is why they emphasize building reserves on which they can fall back when times are bad. Therefore, they typically pay out only about one third of their earnings. While they do not grow very fast - mostly in line with the nominal GDP of their home country - their shares are almost without an alternative for investors when nominal bond yields are low.

23. **To sum up, the picture that emerges from the above analysis is confusing. Some stock markets, especially in America, are overextended and should be avoided. As a minimum, I suggest to reduce the share of volatile and expensive stocks in U.S. portfolios. Realtively safe alternatives are the European laggards Italy and Spain, countries which are finally overcoming the financial crisis and their deep and long recessions. Japan and Germany are not so cheap, but they have safe haven qualities.**

24. My guess is that **inflation will remain subdued for at least another year. Monetary policies are therefore not about to spoil the party as yet which will postpone the day of reckoning.** The Fed will continue to tighten only very gradually – the next 25 basis point hike of the Funds Rate may have to wait until December – while the ECB argues that its task to lift inflation to a little less than 2 percent has not been accomplished, and will not be accomplished, as core inflation remains stuck near 1 percent. In addition, the recovery of the euro exchange rate (see the following graph) has been pushing down import and export prices. It introduces a new deflationary challenge for an economy which is closely integrated into world markets. The exchange rate is an important determinant of overall inflation.

real exchange rates

1998=100



*) last value: July 2017

source: Bank for International Settlements; own calculations

25. On balance, monetary policies in the two main advanced economies will stay accommodative and thus lend support to asset prices. **German stocks** have done very well since 2009 and are thus not an obvious choice so late in the game, but low p/e ratios, very high risk premia, reasonable price-to-book ratios and attractive dividend yields reduce the risk of a shock-like correction, plus, of course, relatively sound public finances and, at the present level of the exchange rate, a super-competitive corporate sector.

the pros and cons of Japanese and Chinese stocks

26. As to the two Asian markets in the table above, they should be represented in any well-diversified portfolio. **For Japan the air may have become thin after the long rally, but by other standards its stock market is not overpriced relative to others.** Compared to a yield of exactly 0.0% on 10-year government bonds ("JGBs") and an expected 2017 inflation rate of 0.5 percent, an average dividend yield of 1.8% looks reasonable.

27. **The yen has depreciated against the dollar for five years now** – from 78 to presently 108 yen per dollar, after hitting a low of 118 at the beginning of the year – which has boosted both the economy and inflation. Real GDP may exceed last year's level by almost 2 percent. A shrinking output gap and imported inflation in the wake of the depreciating currency mean that deflation is now less of a risk.

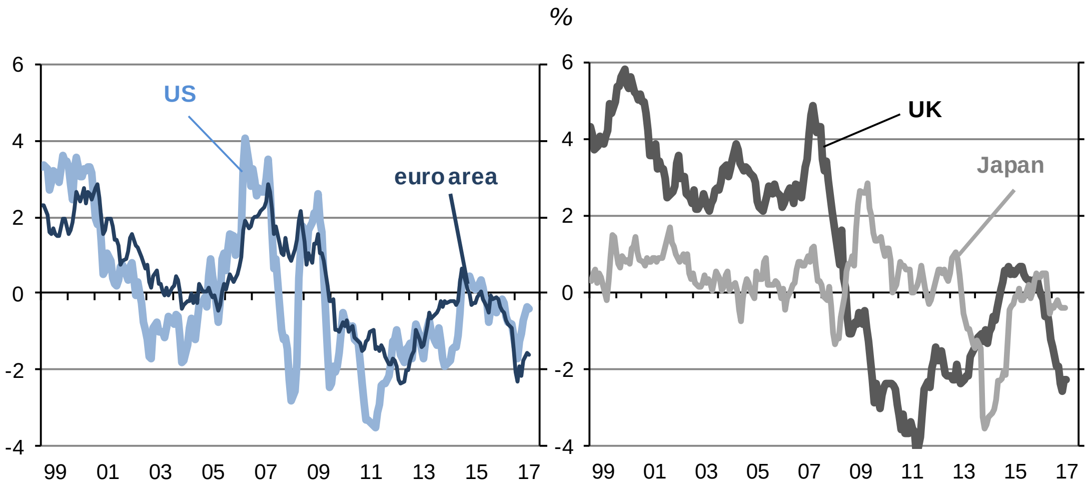
28. It is much too early to declare victory, though, so the Bank of Japan will keep its foot on the accelerator and will not reduce the degree of monetary stimulus. **As in the euro area, this year's rebound of the currency has begun to worry the central bank.** If this continues, it could ring in the next round of deflation after all. Japan is East Asia's main safe haven and attracts foreign funds in times of crisis – even though North Korea's missiles are just a few minutes away. In other words, it **is unlikely that monetary policies will be the cause of the next stock market correction in Japan. The trigger will be pulled somewhere else.**

29. **China's main stock market index CSI 300 has significantly underperformed the growth rate of nominal GDP since the first quarter of 2009 (6.4 vs. 11.0 percent p.a., in yuan terms)** and has thus come down to earth after the speculative excesses of 2006 and 2007. On the basis of p/e and p/b ratios valuations are similar to those of European markets, but the dividend yield of 1.9% is a little below this year's expected inflation rate of 2.0 percent and significantly below the 3.67% yield of 10-year government bonds. As the table above shows, risk premia are quite low. **These indicators suggest that there are more attractive stock markets right now.**

30. But China remains **a rapidly growing economy** whose nominal GDP has already overtaken the U.S. in purchasing power parity terms; on the basis of the past 8¼ years' trends (the reference period in column 2 of the table above), by 2024 or 2025 China will also have the world's largest nominal GDP at actual exchange rates. In this respect, **investments in China are a must**. Since the country is gorging itself on debt, reflected in house price inflation rates of more than 10 percent (according to the IMF), risks are large. Capital controls and the unpredictability of state interventions are additional issues. Investors are advised to enter the market mostly indirectly via non-Chinese companies which are doing well in China, or via Hong Kong.

31. At this point, I draw the following conclusion: **global stock markets are well supported by very low real policy rates and accommodative monetary policies in general**. It is not likely that central banks will abruptly change course as both underlying and headline inflation rates are below-target.

real 3-month money market rates*)



*) 3m money market rate minus annual CPI inflation rate - last value: July 2017 (Japan: June 2017)

sources: OECD, Federal Reserve, ECB; own calculations

robust and synchronized global growth also supports stock markets

32. Stocks are also supported by robust and synchronized GDP growth in the main economies (the UK is the exception) and apparently by a **continuation of the shift of national income in favor of capital, ie, corporate profits.** As pointed out above, wages are determined by an increasingly integrated worldwide labor market. In the advanced economies they cannot rise as fast as at similar stages of the business cycle in the past. The fall in the share of labor income is only sustainable in the longer run if social and tax policies offset the uneven and thus potentially disruptive distribution of income and wealth. Scandinavian countries show how prosperity can be shared, but few of the others are following their role model.

33. **Looking at the main economic indicators, we are indeed living in a goldilocks world. Here are the most recent projections of the IMF: real GDP of advanced economies is expected to expand by 2.0 and 1.9 percent this year and next, with inflation in the same order of magnitude (1.9 and 1.8 percent).** I guess that the inflation numbers will have to be revised down in future issues of the World Economic Outlook because core rates, as predictors of headline inflation, as well as unit labor costs are rising much too slowly. It is also not unlikely that output gaps are much larger than the IMF calculates – which would also depress inflation. The variations around those means will probably be quite small: for the US, the IMF forecasts growth rates of 2.1 percent in both years, for the euro area it has 1.9 and 1.7 percent, and 1.3 and 0.6 percent for Japan (looks too low for me). Spain is now recovering very fast from its deep recession (3.1 and 2.4 percent) and is thus the star performer of the OECD region. But its unemployment rate is still at 17 percent!

34. **For those living in Germany it feels like a genuine boom**, so it is surprising that the IMF puts the 2017 growth rate at just 1.8 percent, followed by a slowdown to 1.6 percent in 2018, presumably because of capacity constraints. Surveys of households and business show a lot

of optimism about the future as multi-year jobs growth of 1½ percent has brought the country close to full employment.

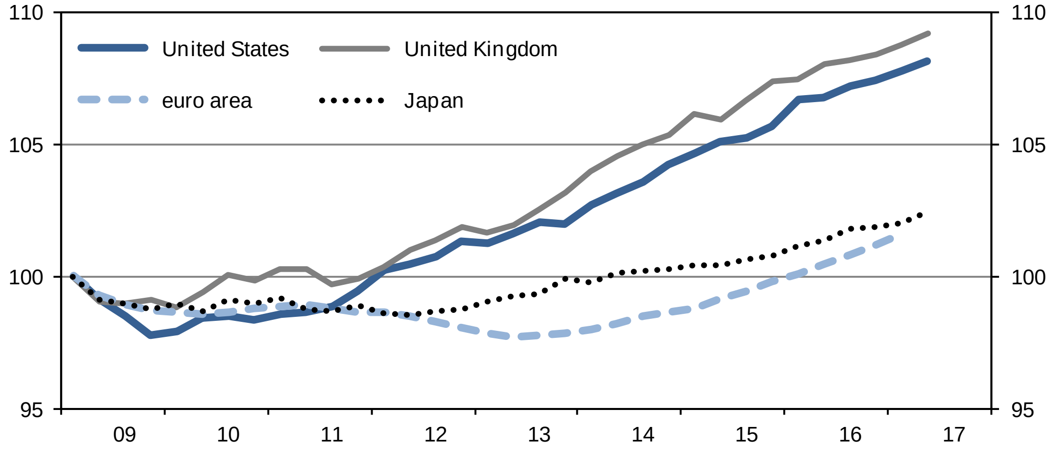
35. Not widely noticed, **it is domestic demand which is now driving the economy, not exports**. The surplus in the balance on current account has shrunk accordingly; in the second quarter it had come down to 7.2 percent of GDP, after 8.9 one year ago. Germany has become the driving force for the whole euro area, and for other countries nearby. Why does the IMF project such modest growth rates? It's beyond me. There are no indications of a coming slowdown. I'd rather bet that growth this year will be 2.1 percent, and something similar next year.

36. **The euro area as a whole is also doing quite well**, even though there has been no fiscal stimulus to speak of. The cyclically adjusted fiscal deficit has only been around 1 percent for about four years now – the talk of austerity driving the currency union to the wall, or finishing it off, has clearly been misplaced. Why then has the area's real GDP accelerated to rates of 2 percent recently, which on a per-capita basis is faster than that of the U.S.? Stimulus came mainly from the weak euro, ie, the significant depreciation of the real exchange rate that began in 2009 and has pushed it down by about 16 percent by now. International price competitiveness is excellent (see the graph next to paragraph 24).

37. **Unless the euro appreciates steeply from here on, euro area GDP growth of 2 percent or more for several years is now a real possibility**. Employment has been expanding at annual rates of 1 percent since 2013, with an acceleration to 1½ percent more recently. This provides a solid basis for domestic demand growth.

employment trends in major economies

persons employed; 2009Q1=100



*) last value: US (17Q2), euro area (17Q1), Japan (17Q2), UK (17Q2)
sources: Eurostat, Federal Reserve, MIAC-Statistics Bureau

38. **One effect of the long-lasting "soft austerity" are sound public finances**, not only in Germany, but more or less across the whole region. This year's aggregated government deficit will be just 1.3 percent of GDP which compares favorably with the U.S. (3.4%) and Japan (4.5%). Aggregated gross general government debt, at 90 percent of GDP, is also relatively low (U.S. 108%, Japan 239%). I dare say that the euro area is now experiencing a self-sustained expansion that does not rely on fiscal policies, or an even weaker exchange rate, or additional monetary stimulus.

39. As in the past decade, the **main drivers of the global economy are the emerging market and developing economies: their share in world output is now larger than that of advanced economies, and they are growing much faster**. The IMF predicts that the real GDP of that part of the world will rise by 4.6 and 4.8 percent year-on-year in 2017 and 2018.

40. It is likely that the growth differential vis-à-vis OECD countries will persist for years to come, mainly because very low per capita incomes provide the basis for long-lasting catching-up processes, combined with high saving and investment ratios and a new pick-up in world trade volumes. **The high and fairly steady underlying rate of growth of emerging economies is a stabilizing factor for the world economy as a whole** and perhaps another reason why stock markets in advanced economies are so strong – low expected volatility translates into low risk premia and high valuations.

41. **How about inflation? It is also part of the goldilocks picture.** In the main advanced economies - the U.S., the euro area and Japan -, consumer prices this year will rise by close to 2 percent, 1½ percent and ½ percent, respectively. Core inflation rates are significantly lower than that and suggest that in none of the three economies will headline reach the 2 percent targets of central banks. Therefore they all hesitate to tighten aggressively, if at all. Policy rates will remain far below neutral.

42. While these are bad news for savers, commercial banks and life insurers, they are good news for borrowers, ie, house builders, investors in machinery, equipment and software – and for the state. Especially continental European governments have benefited a great deal from the record-low rates they pay on their new debt. Investment banks are mostly doing fine as rising bond and stock markets have boosted their income from commissions and own-account trading.

beware of all the good news

43. **On a macro level, we almost live in a perfect world**: growth is robust and spread quite evenly across the world, employment expands briskly, inflation is low, monetary policies are and will remain accommodative, borrowing conditions are good – especially those low interest rates! -, the euro crisis has presumably been overcome by appropriate institutional changes and a supportive ECB, foreign exchange markets are not very volatile and do not significantly distort cross-border investment decisions, and profits could not be larger. It is almost too good to be true. Compared to all these positives, the ongoing destruction of the planet and the unfair distribution of income and wealth inside and across countries are just irritants, of little near-term concern for market participants.

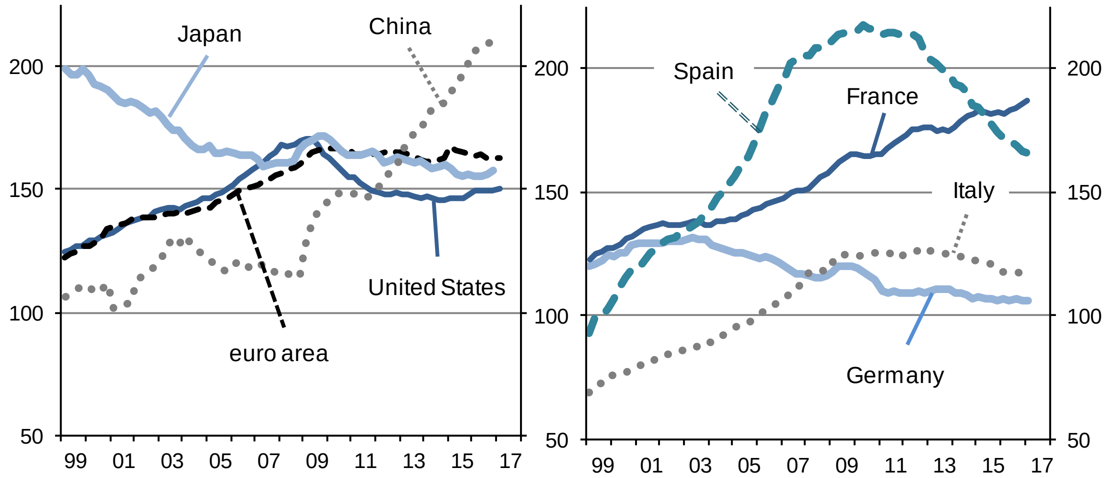
44. **But it is precisely at times of complacency and supportive economic policies that crises begin.** Expensive assets such as stocks, bonds or real estate imply that the scope for future capital gains is limited. When financial investors become aware of this simple arithmetic, some of them will try to lock in their paper gains and take profits. A downward spiral begins as the herd follows the leaders to the exit. The process would gain momentum if central banks also decided that it was about time to raise interest rates more aggressively. But this is not a sine-qua-non for a major market correction. Market forces alone can be strong enough if the disequilibrium that needs to be corrected is large enough. This is the case today.

45. **It is also not necessary that all markets correct simultaneously** – as we have seen in the U.S. sub-prime crisis of 2007/08, it suffices if a single large and distinctly overvalued section of asset markets goes into a free fall. This time around, the trigger could be China where private debt has increased by a factor of more than 2 relative to GDP since 2008. In relative terms, debt is now a lot higher than America's in 2008; it is about as high as Spain's before the crash. High asset prices based on borrowed money is usually an explosive mix.

46. To be honest, **crises typically originate in unexpected corners of the world economy**. How about France? Have a look at the following graph. Or **once again the U.S.? There, the stock market is extremely expensive** if one applies yardsticks such as annual capital gains since 2009, p/e ratios, risk premia and p/b ratios. Note that debt levels are not significantly lower than nine years ago, before the last crisis. Investors may also come to the conclusion that the dollar is overvalued, given its poor fundamentals, and should therefore be sold as well. This could quickly become a bush fire that spreads around the world.

private non-financial sector debt*)

% of GDP



*) latest data for 2017Q1; China and Japan: 2016Q4
sources: Federal Reserve, ECB, BIS; own calculations

47. As we have learned, markets can move in the wrong direction for longer than one would reasonably expect. "Shorts" have often been entered prematurely and investors following that strategy have lost their shirts. It may therefore be enough to **start by moving funds into money markets where price risks are near zero, to shorten maturities in general, to look for "boring" and neglected yet solid markets, to exchange growth stocks for dividend, ie, income stocks, and to reduce debt. When the big sell-out starts one day, these will be "crowded" trades which are not as easy to realize as today.**