WEBLOG

Wermuth's
Investment Outlook

September 2016

ZEIT online • HERDENTRIEB

blog.zeit.de/herdentrieb/

Weak productivity boosts asset markets

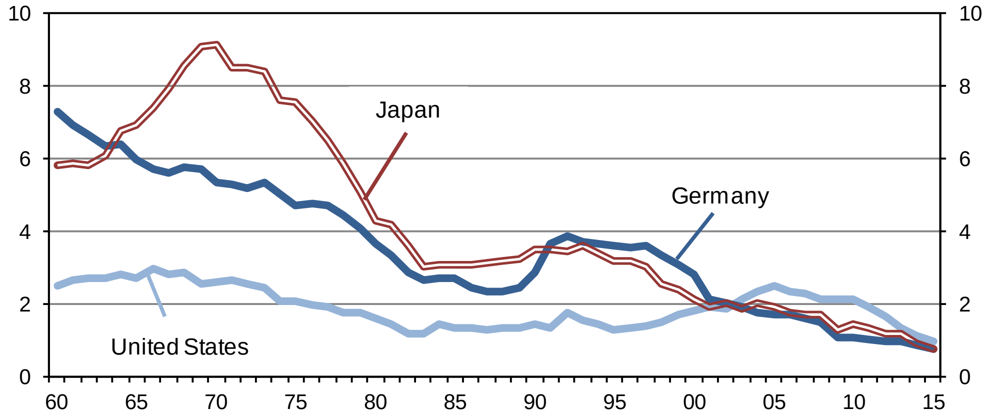
by Dieter Wermuth*

1. If productivity growth in the OECD remains subdued - and thus far slower than in earlier decades -, **investors have to get used to the idea that, on average, they cannot expect attractive yields anymore.** A fundamental change may be underway. Safe haven assets such as bonds issued by investment-grade governments, equities of well-managed companies or real estate will be more expensive than they used to be and thus generate disappointing returns in real, inflation-adjusted terms.

2. At the same time, free trade and the catching-up processes in emerging economies keep inflation in check in Western Europe, North America and Japan, despite all the efforts of central banks to get it going again. **The combination of slow growth and low inflation may be the new "normal". Unless there are signs that these trends are about to be reversed, investors must learn to live with them.**

labour productivity*)

% y/y; 10-year moving average



*) real GDP per hour worked

source: Conference Board

3. **Let's start the analysis by looking at the short-term market drivers. I will address the implication of the productivity puzzle toward the end of this essay.**

* Dieter Wermuth is a partner with Wermuth Asset Management GmbH and regularly contributes texts to the HERDENTRIEB weblog which is available on the ZEIT online website.

the near-term outlook

4. In the rich countries, there is obviously no lack of liquidity. Central banks remain extremely expansionary. But economic growth is sluggish, and inflation has yet to accelerate in a meaningful way. In spite of the monetary stimulus, households, business and governments hesitate to borrow and spend more. They are skeptical about future income and revenue; for governments, the focus is still on debt and deficit reduction. In 2016, r**eal GDP of the OECD countries will exceed last year's level by just 1½ percent, and 2017 does not look better. The risk of a new recession is not negligible.**

5. To cite from the updated Economic Outlook of the OECD, "the **world economy remains in a low-growth trap** with persistent growth disappointments weighing on growth expectations and feeding back into weak trade, investment, productivity and wages."

6. While the real economy stutters, stock, bond and real estate markets are quite expensive by historical standards. This is the flip side of subdued consumer and business spending.

p/e ratios and equity risk premia

7. As the following table shows, **price-to-earnings ratios are mostly in excess of 20 and thus much higher than usual.** On the basis of this metric, the British and Italian markets are particularly expensive. Only the stock markets of China, France and the Netherlands are priced reasonably.

equity risk premia and expected corporate profits

as of Sep 28, 2016

	p/e ratio based on actual earnings	earnings yield	10y govern-ment bond yield	10y inflation expect-ations	real 10y govern-ment bond yield	risk premia	p/e ratio based on next year's earnings	expected increase of earnings per share
		%	%	%	%	*pp*		%
	(1)	(2) = 1/(1)	(3)	(4)	(5) =(3)-(4)	(6) =(2)-(5)	(7)	(8) =(1):(7)
US	20.0	5.0	1.6	1.5	0.1	4.9	16.3	23.1
China	17.4	5.8	2.7	3.0*)	-0.3	6.1	12.4	39.9
Japan	20.5	4.9	-0.1	0.3	-0.4	5.2	15.3	33.7
UK	57.6	1.7	0.7	2.7	-2.0	3.7	14.9	286.3
Canada	23.3	4.3	1.0	1.2	-0.2	4.5	16.0	45.4
Sweden	22.6	4.4	0.1	1.5	-1.4	5.8	14.8	52.6
Switzerland	29.4	3.4	-0.6	1.0*)	-1.6	5.0	16.3	80.9
euro area	23.5	4.2	0.0	1.3	-1.3	5.6	13.0	81.8
Germany	23.7	4.2	-0.1	0.9	-1.1	5.3	12.5	90.0
France	16.4	6.1	0.2	0.9	-0.8	6.9	13.3	22.6
Italy	37.5	2.7	1.2	0.7	0.5	2.2	11.2	235.8
Spain	21.7	4.6	0.9	1.6*)	-0.7	5.3	12.7	70.8
Netherlands	18.1	5.5	0.0	1.2*)	-1.2	6.7	14.9	21.6

*) 5-year inflation forecast by the IMF

source: Bloomberg; own calculations

8. Government bond yields, meanwhile, are near their historical lows. Not only that, they have come down steeply over the past year. In many cases, nominal 10-year yields are near zero or negative. In real terms, they are even lower. This is one reason why the so-called equity risk premium is relatively high – the premium compares corporate earnings yields (the inverse of the p/e ratio) with real riskless long-term bond yields. The lower the latter, the higher the risk premium, and if it is high, chances are that equities are not overvalued. Historically, risk premia of advanced economies have been in the range of 3 to 7.

9. **For many of the banks, pension funds and insurance companies, the situation is getting critical as they have to replace maturing bonds with zero-yielding alternatives**. To cite the OECD again, "banks' traditional model of borrowing short and lending long is undermined by flat yield curves – at the same time, negative deposit rates, low lending volumes and banking overcapacity imply lower profits." Bank stocks have mostly taken a hit, and often cost less than their book value. Deutsche Bank, Germany's largest, is facing an existential crisis and may have to be rescued and taken over by the government. European banks in general are struggling to survive.

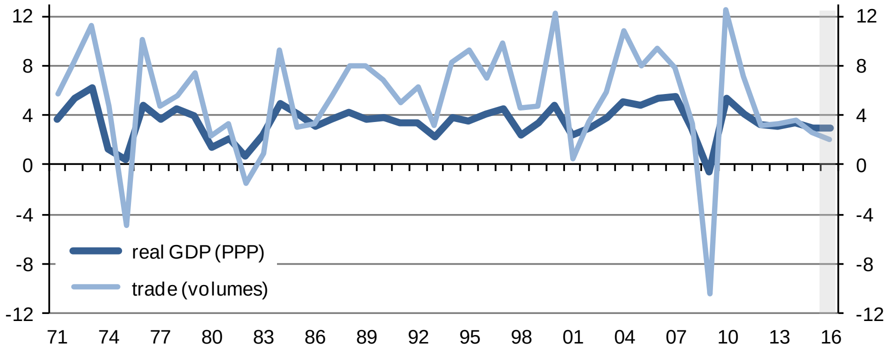
10. In addition, **should central banks decide that policy rates must go up**, in response to improved labor market conditions, or rising inflation rates, or both, **the value of banks' bond portfolios will shrink.** Of OECD sovereign debt, 35 percent is trading at negative yields! In order to stimulate demand, economic growth and inflation, the ECB, the Fed and the others have kept the foot on the accelerator for many years and have accepted the creation of financial imbalances, ie, bubbles, and thus the risk of another financial crisis.

11. **Equities may be expensive, but compared to bonds they are not.** They also pay dividends, and these are significantly higher than government bond yields, especially in Europe. The question is whether stock prices are supported by earnings growth or not. According to the consensus forecasts on Bloomberg, profits next year will be between 22 and almost 300 percent higher than reported profits in the past four quarters - have a look at the last column of the table.

12. **High price-to-earnings multiples are justified if earnings per share can be expected to rise briskly in the coming years.** This is not the case today. At least on average, profits are highly correlated with real GDP as well as productivity growth. Both are expanding at rather moderate rates and are not accelerating.

growth rates of real global GDP and the volume of world trade*)

%, yoy



*) 2016 OECD projections; average growth rate 1971 to 2016: real PPP-GDP 3.5 %, real world trade 5.2%

source: OECD; own calculations

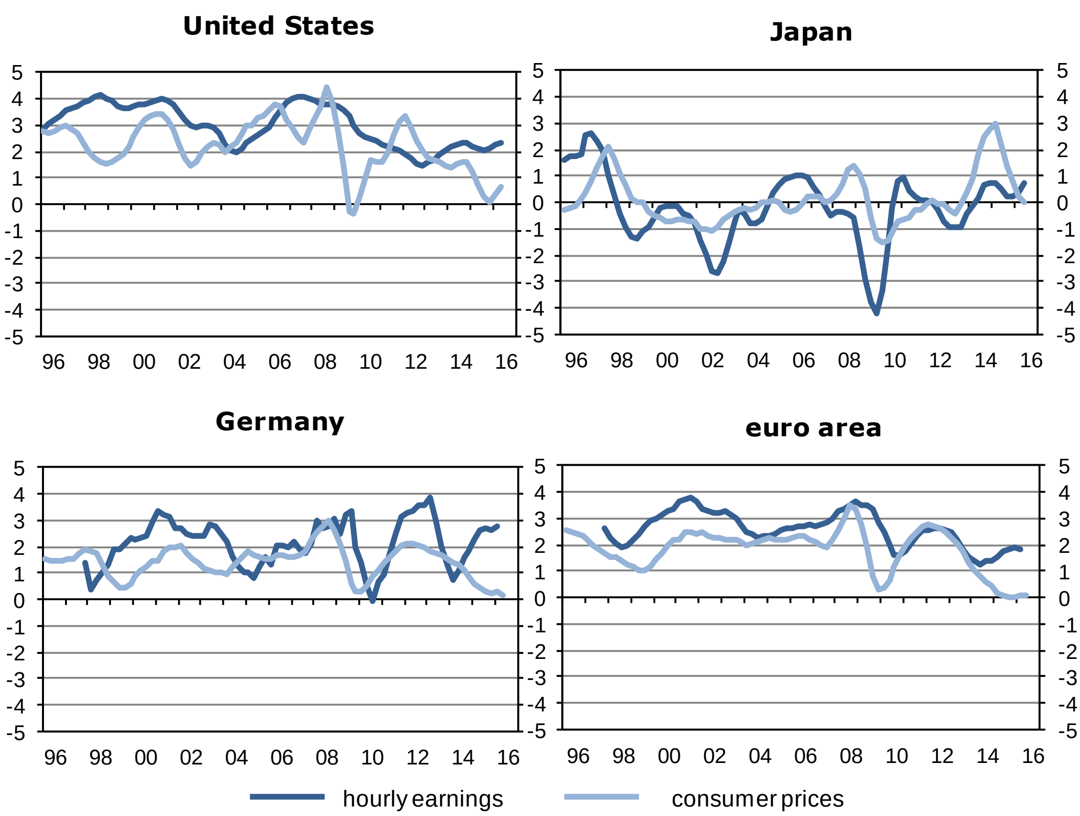
US monetary policies in the lead

13. In the US, the economy may do better from here on as fiscal policies are eased somewhat. Real GDP this year will exceed last year's level by 1.4 percent (says the OECD), but then expand by 2.1 percent in 2017. Monetary policies are already ultra-accommodative and thus cannot provide additional stimulus. Just the opposite, **the Fed is about to raise interest rates in order to slow, rather than boost final demand.** Earlier this year, four policy rate hikes had been announced for 2016, but nothing has happened so far – because real GDP had increased at an annualized rate of only 1 percent in the first half of 2016. At the same time, employment growth has been around 2 percent, as in previous years. The US has achieved full employment by now – while the economy has almost stagnated.

14. The Fed has a small window of opportunity to tighten policies. It had undertaken a cautious first step in December 2015 and seems determined to continue on that path at the last FOMC meeting of the year, after the November 8 presidential elections. **When the next recession arrives it would be helpful if policy rates could be cut – but this requires that they must rise to a considerably higher level first.** This much is clear, but the Fed has so far procrastinated. I do not think that rate increases will drive up the dollar exchange rate so much that they will pose a serious threat to the recovery. This cannot be used as an argument for not moving. Interest rates are just one of several FX determinants.

hourly earnings and consumer price inflation

% y/y; 4-quarter moving averages



note: average annual increase (1996-2015): US hourly earnings: 3.0%; US CPI: 2.2%; Japan hourly earnings: -0.5%; Japan CPI: 0.1%; German hourly earnings: 2.1%; German CPI: 1.4%; euro area hourly earnings: 2.6%; euro area CPI: 1.8%

source: OECD; own calculations

15. **US profits will not rise much, if at all from here on, mainly because unit labor costs are increasing steeply while producer prices (a proxy for revenues) have been more or less unchanged for one year**. Moreover, profits had been strong for several years, have outpaced labor income significantly and are now in for some sort of normalization. As the previous graph shows, real wages have finally begun to rise somewhat faster than in the past.

16. Compared to other stock markets, the valuation of S&P 500 stocks is not excessive. Still, as the table shows, the consensus is that profits will rise by about a quarter over the one and a half years through 2017. This is overly optimistic given the fundamentals and the likely tightening of monetary policies. The near-term upside potential of stock prices is therefore quite limited. A global stock market correction would not spare America.

17. The real yield on US Treasuries is slightly positive while the nominal yield is well above the OECD average. Inflation expectations for the coming ten years are relatively high, and most analysts predict that actual inflation will reach and then exceed the Fed's 2 percent target sometime in 2017 (another reason why the FOMC has room to raise rates). To be sure, **US bond yields are higher than differences in international inflation expectations would suggest.** Why is this? Somehow investors do not regard US Treasuries as safe havens. Perhaps they are impressed by the high level of gross government debt (likely to be 107.5 percent of nominal GDP this year) and may anticipate a depreciation of the dollar against euro and yen – on the basis of 10-year bond yield differentials, they expect the dollar to lose, for ten years, about 1.7 percent annually against these two currencies.

18. Another plausible explanation for the relatively high level of treasury yields has to do with the **market view that the Fed can afford to tighten while the other central banks mostly can't.** The prospect of a coming increase of US short-term rates makes investors risk averse. They demand a correspondingly higher risk premium – the longer the duration of the debt the more. Remember the so-called taper tantrum, the violent selling of bonds, when the Fed first indicated it might change course a couple of years ago?

euro area bond markets dismiss the risk of ECB tightening

19. In other bond markets the risks of rising policy rates are not yet taken seriously; monetary policies continue to be seen as supportive for bonds. This may actually be too optimistic**. I wonder what will happen if the Fed does indeed launch a series of quick rate hikes.** In the past, other central banks have usually followed suit, after an appropriate time lag (see the following graph on the next page).

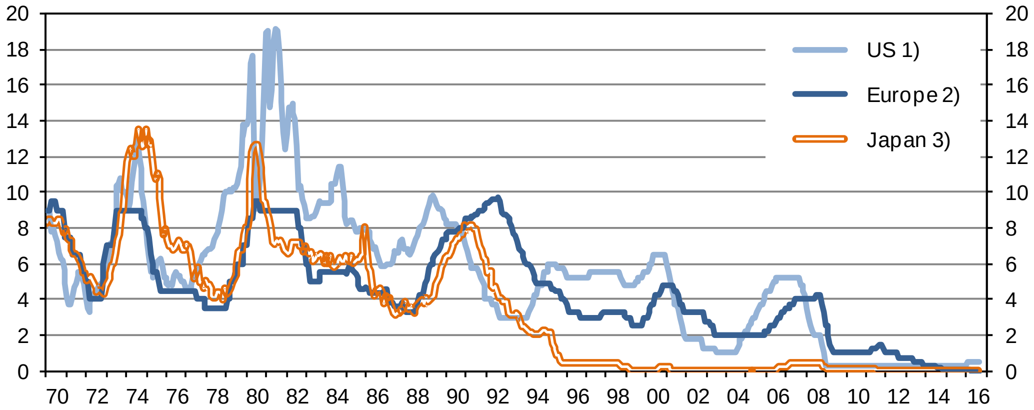
20. In other words, **non-US bond markets are very expensive** and do not price in the risk that the Fed may soon start to tighten in earnest. The subsequent wave of rate hikes in other OECD countries would push up bond yields, flatten yield curves further and thus make life even harder for banks.

21. **Investors have also decided that there won't be another euro crisis**, or if there were one, it would be manageable, given the available rescue funds of the euro area and the new bail-in rules which have cut the dangerous link between banks and sovereigns. In the optimistic view, the mere existence of the new instruments and rules may prevent a run out of the weaker markets in the first place. The spreads of Italian and Spanish government bonds over

Bunds of roughly 120 basis points are presently seen as a sufficient compensation for the risk of a euro break-up. In this regard, the situation increasingly resembles the one before the outbreak of the financial crisis in 2007. Only Greek bonds remain totally out of favor while Portuguese bonds are somewhere in between.

policy rates

percent



1) Federal Funds Rate - 2) 1970-1984 Lombardsatz of the Bundesbank, 1985-1998 Wertpapierpensionssatz of the Bundesbank, since 1999 MRO of the ECB - 3) Overnight Call Rate

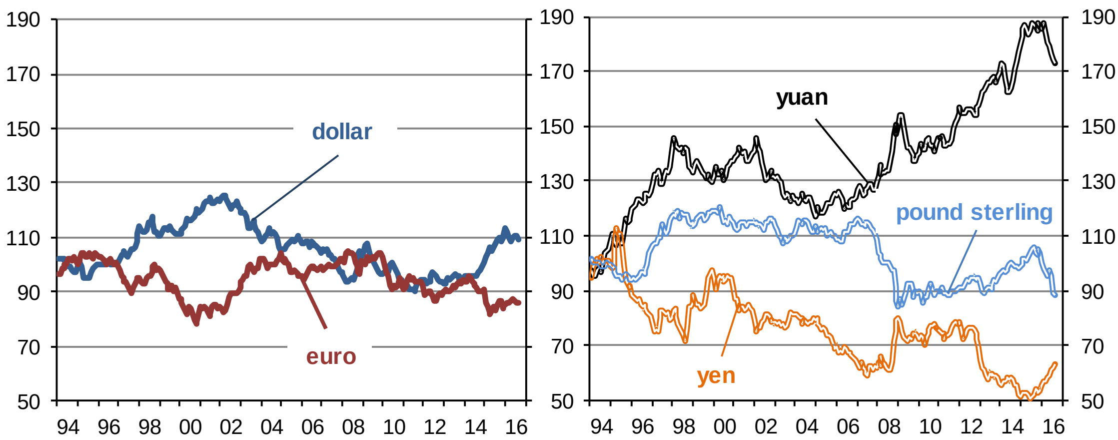
sources: Federal Reserve, Bundesbank, ECB, Bank of Japan

the euro-dollar exchange rate is too low, given the fundamentals

22. **How come the euro has been more or less stable against the dollar for many months now? In real trade-weighted terms, the dollar has actually appreciated significantly while the euro has weakened**. Among the majors, the dollar has been by far the strongest currency in 2016. This has resulted in large negative contributions of net exports to US GDP growth. The dollar is a drag on growth (but not on US employment so far).

real exchange rates

1994=100



source: Bank for International Settlements; own calculations

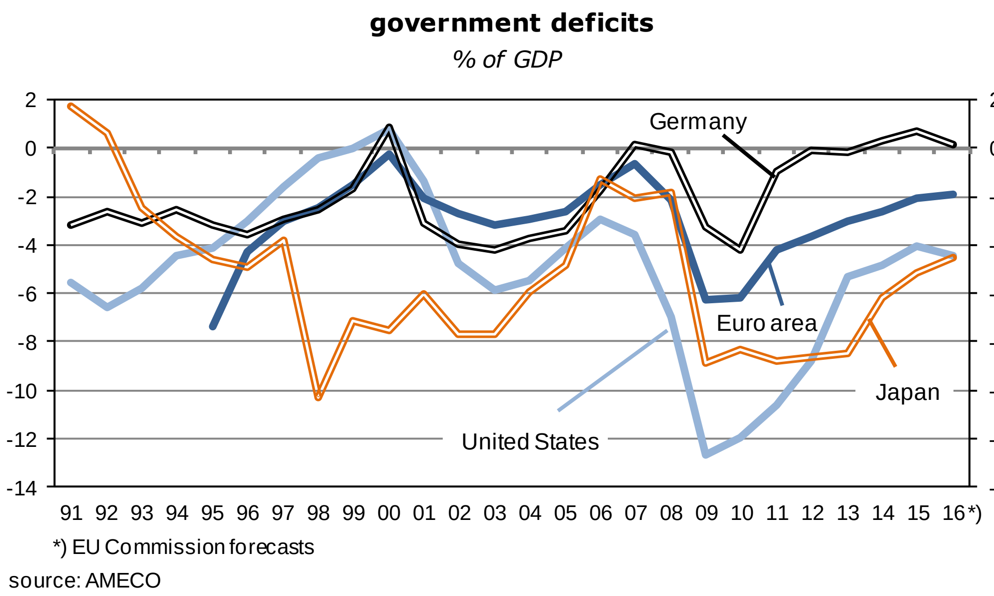
23. **Two factors support the dollar: slightly higher money market rates, including the expectation that the interest rate differential at the short end will soon widen in favor of the US, plus the very aggressive expansion of the ECB balance sheet** – within twelve months,

net bond purchases of the ECB will amount to no less than 960 bn euros, or almost 9 percent of this year's GDP. For comparison, the likely euro area government deficit will be just 1.8 percent of GDP. The Fed, on the other hand, has stopped the expansion of its balance sheet as it cautiously moves toward tightening. Put differently, the supply of euros via the central bank increases briskly while the supply of dollars stagnates.

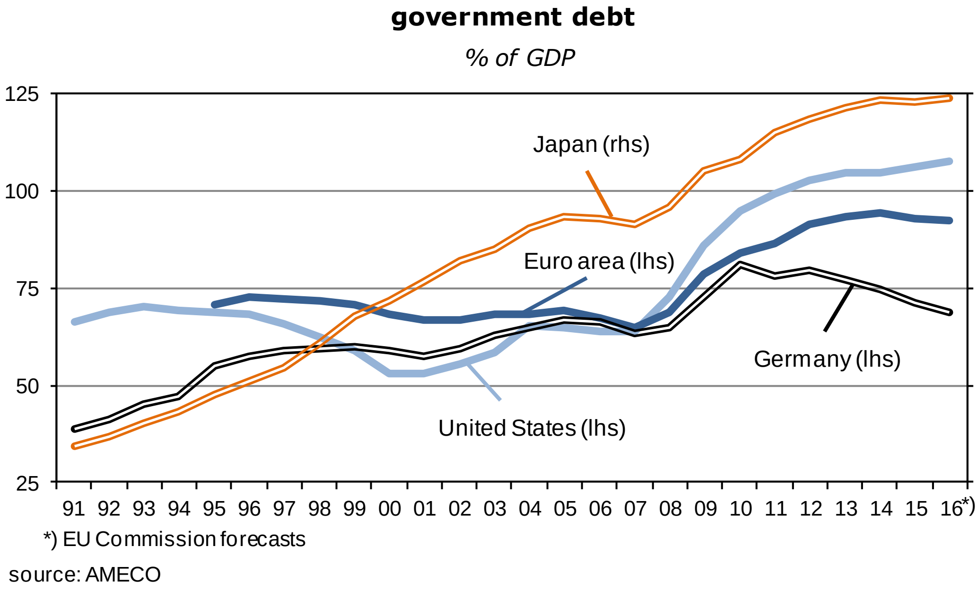
24. But the euro exchange rate is not only held down by the flood of fresh money; there is in addition the apparent intention of the ECB board to prevent any meaningful appreciation. In the absence of inflation risks, a weak euro is seen as an important means of fighting deflation and stimulating economic activity. The unemployment rate is still at over 10 percent.

25. **Two fundamentals suggest that the euro has considerable upside potential. One is the fiscal situation, the other the large current account surplus.**

26. Most estimates call for a euro area government deficit of just 1.8 percent this year. This compares favorably with the expected US deficit of 4.3 percent. Moreover, both presidential candidates will pursue a more expansionary fiscal policy while the euro area countries will continue to reduce their deficits – Germany is expected to have a smaller surplus, or none at all, whereas the others (pro-cyclically) focus on deficit reduction. On balance, euro area fiscal policies remain restrictive.



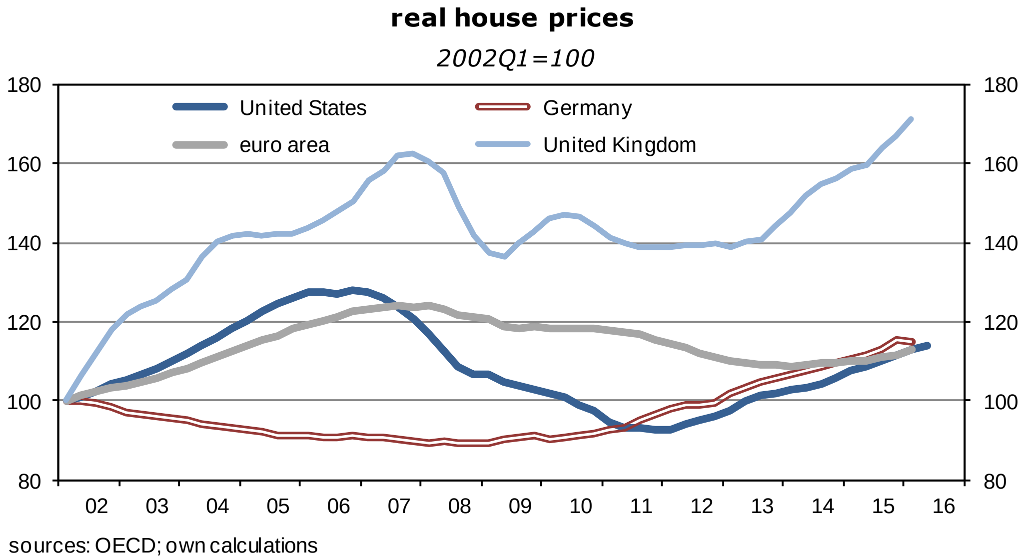
27. Government debt levels also reflect large differences in fiscal probity. **In aggregate, at almost 90 percent of GDP, euro area debt is still way above the 60 percent Maastricht benchmark but it compares favorably with US debt levels.** Americans are decidedly more relaxed than euro area politicians – that debt will hit 107.5 percent of GDP this year is not a major issue in the public debate. Why should it be, as international investors continue to load up on Treasury paper? The terms may not be as favorable as those of the Swiss, German, French or Dutch issuers, but since US inflation seems to move toward 2 percent, a real rate of around zero for ten years is certainly not a reason to worry. Still, **for the exchange rate, large government debt is a negative in the long run.**



28. **Another negative for the dollar is the persistently large deficit in the US balance on current account. It will reach almost 3 percent of GDP this year while the euro area's is expected to show a surplus of about 3½ percent.** Historically, differences in current account developments are the key determinants of exchange rates. I wonder what the ECB can do should the fundamentals start to drive FX markets one day. Buying dollars will not be an option given the ECB's ambition to maintain the euro's status as a reserve currency. And monetary policies cannot become much more expansionary. The answer is therefore that the ECB will have to accept any exchange rate the market generates. Forward guidance will have little impact when there is an obvious lack of policy alternatives.

German real estate finally takes off

29. Incidentally, not only the dollar or the stocks and bonds of OECD countries are expensive these days, **some large real estate markets have also taken off**. Even in Germany house prices are now rising steeply, especially in metropolitan areas and university towns. Rather than shrinking, the population and the number of households have begun to expand briskly,



helped by the large inflow of refugees. Record-low mortgage rates are another catalyst. So far, investment returns are quite attractive compared to the alternatives. Supply does not match demand yet – in real terms, orders for new housing exceed their year-ago level by almost one third. The construction boom has thus only just begun. It is one of the main reasons why, according to the OECD, Germany's economy will grow by 1.8 percent this year. Because the housing market had been in a virtual slumber for many years, the risk of a bubble is small.

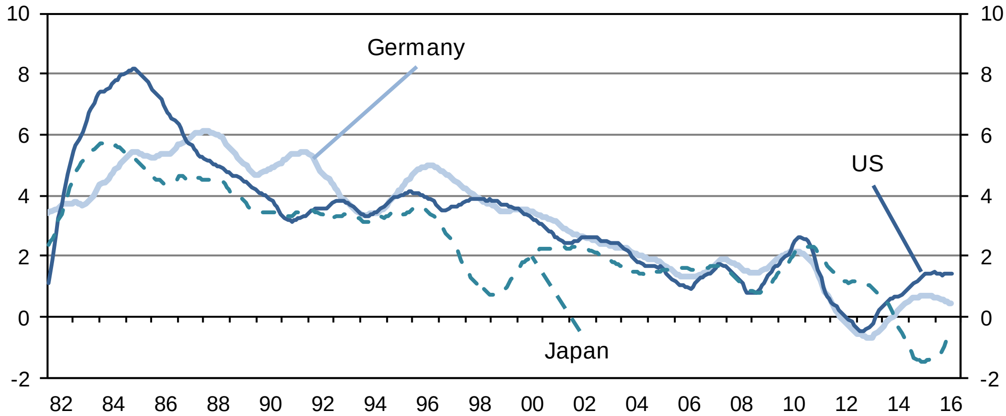
in OECD countries, productivity growth will remain slow

30. **Let's now turn to productivity. It is one of the main puzzles for economists and financial investors**. In spite of the digital revolution, output per hour worked is hardly increasing any more. In the US, it has recently declined steeply. It has slowed to a crawl more or less across the entire OECD area in what looks like a new – and worrying – secular trend. If productivity growth in the rich countries does not pick up from its recent pace of about half a percent annually, average inflation-adjusted income will also increase at such a rate. This includes returns from investment in stocks, bonds and real estate. If prices of one of these assets rise faster, such as, presently, those of real estate in some countries, the others will fall or increase very slowly.

31. **It could be that low real bond yields are the new normal, just as high price-to-earnings ratios of stocks – these look high from a historical perspective but not compared to the new meager progress of productivity.**

real 10-year government bond yields*)

24-month moving averages; %



*) 10y government bond yield minus annual CPI inflation rate
sources: Deutsche Bundesbank, Federal Reserve, ECB; own calculations

32. **To achieve high returns requires, more than ever, accepting more risk. Investors must either reduce their performance targets or shift their allocations into riskier assets**, for instance into private equity, emerging market bonds and equities, or commodities. For the economy as a whole this micro-strategy is not a viable option. Policy makers must rather try to boost productivity growth – which is actually possible – but if they don't succeed, expectations about the future standard of living and the pace of economic growth must be scaled back. If this is accompanied by a further redistribution of income in favor of the rich,

the social cohesion of society will fray further and radical parties will become a permanent feature of the political landscape.

33. The most comprehensive analysis of productivity trends has recently been provided by Robert Gordon, an economics professor at Northwestern University in Illinois and the pope of productivity ("The Rise and Fall of American Growth – the U.S. Standard of Living since the Civil War", Princeton University Press, 2016). To quote his key sentence: "… **the Third Industrial Revolution (IR#3), though utterly changing the way Americans obtain information and communicate, did not extend across the full span of human life as did IR#2**, with the epochal changes it created in the dimensions of food, clothing, housing and its equipment, transportation, information, communication, entertainment, the curing of diseases and conquest of infant mortality, and the improvement of working conditions on the job and at home." (page 601) In other words, productivity growth will be slower than in the past.

34. Because of several persistent headwinds, **Gordon expects a growth rate of just 1.2 percent during 2014 to 2040** which is a large decline compared to 1920-1970 (2.82%) and 1970-2014 (1.62%). Should this indeed be the new standard, high price-to-earnings ratios will come to be regarded as normal in the longer run, just as very low real bond yields.

35. **According to Gordon, today's innovations in terms of new products and processes are less than revolutionary.** The main inventions and innovations have happened in the past, especially in the glorious 50 years before 1970. He quotes the Californian investor Peter Thiel who said "We wanted flying cars, instead we got 140 characters." What are the productivity contributions of Facebook or computer games?

36. The **four headwinds** identified by Gordon for the US economy are (1) the **rising inequality** of income and wealth, (2) **no further improvements in educational attainments** – there will not be another surge in high school graduation rates, (3) the retirement of the baby boomers (born between 1946 and 1964) and the **stagnation and possibly the reduction of labor force participation rates**, and (4) **rising debt to GDP ratios as the population ages** and population growth slows – "disposable income will decline relative to real income before taxes and transfers, reversing the trend of the past quarter century." (p. 630)

37. **Two other important but hard to quantify headwinds are "globalization" and "energy/environment".**

38. A large part of manufacturing activity now takes place in China and other emerging markets. While the international division of labor has slowed recently, it is still very intense. The production of things had been a key source of OECD productivity, but in the meantime output growth in this sector has almost disappeared. For many years even Germany, supposedly Europe's industrial power house, has witnessed a stagnation of its industrial output. **Productivity growth must therefore increasingly come from services, but the potential of many of the labor-intensive activities is modest** – think retailing, public administration, education, sports, entertainment, insurance, police, accounting and consulting, the law, politics, and so on.

39. As to the possible effects of global warming and other environmental issues on productivity, “future carbon taxes and direct regulatory interventions … will divert investment into research whose sole purpose is improving energy efficiency and fuel economy.” **Measures taken to raise energy efficiency are the operationally equivalent of a capital cost burden.** “… Such investments do not contribute to economic growth in the same sense as such early twentieth-century innovations as the replacement of the icebox by the electric refrigerator or the replacement of the horse by the automobile.” (p. 633f)

40. **I think Gordon has a point in regarding the slowdown of productivity as something not accidental or transitory but permanent. On the basis of traditional valuation approaches, stock, bond and real estate markets may appear to be overvalued – as I have shown above –, while in a longer-term perspective they may actually be a forerunner of things to come and thus quite normal. Hard to say, though, where exactly this will lead. In living memory no one has experienced a market environment where productivity growth is very slow**.