

# Economic Outlook - April 2016

**Philippe Waechter**, Chief Economist

Twitter account: @phil\_waechter or [http://twitter.com/phil\\_waechter](http://twitter.com/phil_waechter)

Blog: <http://philippewaechter.en.nam.natixis.com>

# Overview (1/2)

---

- Industrialised countries have changed regime. Growth is permanently slower than during the pre-crisis period, with the exception of Germany. Emerging countries no longer have the capacity to drive the global economy since China is in a phase of transition towards a service economy.
- That is not creating any pressure on the productive system or on wages.
- Monetary policies have reduced risks, but now seem unable to go any further.
- An impetus must be found that can permanently change the trajectory of the global economy in order to create robust employment growth. Waiting for the macroeconomic impact of technological innovations will take too long. For the time being, the impacts on productivity are too limited to change the growth profile.
- Oil has failed to create this impetus despite a steep and long-lasting fall in its price
- Central banks' low interest rates have also failed to do so.
- The euro zone has been unable to become independent from the global cycle despite of a monetary policy aimed at improving its competitiveness and at making the economic cycle better synchronised between the countries in the zone.
- The United States no longer seems robust enough: this is what Yellen said recently when she indicated that the US economy is not solid enough to absorb external shocks. This is not explained in particular by China or others. That is what is worrying, especially as recent domestic data (consumption, investment) do not point to an acceleration in activity.

## Overview (2/2)

---

- China is no longer the short-term regulator it was in the past, but represents a risk to the global economy because of an excessive debt level, especially among companies.
- The impetus in question could be public investment. Rather than being satisfied with excessively weak growth, let us take a risk when interest rates are very low to shift to a higher trajectory. Economic policy can no longer have only one leg. The accommodating monetary policy has created the prerequisites for a return of growth and inflation, but this must be completed by a more expansionary fiscal policy. There must be as many economic policy instruments as there are objectives. These policies must be all the more active as growth and inflation are far below targets that would reflect a balanced and sustainable situation in the medium term.

# Reasons for the slowdown

---

- **The US economy is no longer accelerating**
  - Job creation remains robust, but...
  - The oil effect on the consumer is less marked than in the past
  - The fall in the oil price is hampering investment
  - The cyclical peak is behind us, the pressures are less pronounced
  - Inflation expectations are at rock bottom
  - Activity has been slowing down in the first part of the year
- **China is in its process of adjustment towards a service economy**
  - Activity, measured by industrial production or exports or via surveys, continues to slow down (the rebound in March is to be confirmed after several months of decline)
  - Our main concern is linked to the economy's excessive debt levels and the resulting risks in an economy that is changing its growth mode. This will result in a very different sectoral ranking, and the excessive debt in certain sectors could cause disruptions that may generate larger volatility at the macroeconomic level
- **The alignment of the planets in the euro zone is not sufficient to revive growth in a sustainable manner**
  - The oil effect has been reduced, it is weak in France
  - The fall in interest rates has not provided any strong momentum to consumption and investment
  - The euro's effective exchange rate tends to appreciate somewhat
  - Judging by the surveys, activity is running out of steam at the beginning of the year

# Slowdown in emerging countries and low oil price

---

- **Emerging countries are still in an adjustment phase**
  - Commodity-producing countries have to make significant adjustments as they can no longer buy social peace, given their declining revenues
  - China no longer plays the role of growth engine, whereas in the past it provided a boost to growth in emerging countries
  - An in-depth review of the strategies is necessary to gain in autonomy
  - Brazil and Russia are mired in a deep recession
- **The oil price will remain low, in the vicinity of 30-40 dollars**
  - The gap between supply and demand remains very significant and is still accompanied by massive stock building
  - The only objective of the recent agreement between Saudi Arabia, Russia, Qatar and Venezuela is to prevent an excessive fall in the price. This has triggered a short-term rise. The conditions for this agreement are still under discussion.
  - The starting point for this agreement was to keep production at the January 2016 level, which was very high: no reduction in the gap between production and demand is envisaged
  - The price will remain low as the adjustment will take place at the stock level
  - This will continue to weigh on inflation throughout the year, prompting central banks to maintain an accommodating strategy

# Accommodating monetary policies

---

- **No reason to change the accommodating monetary strategies, including in the United States**
  - The ECB will continue its accommodating policy for a very a long time to come. The program of liquidity provision to banks will expire in March 2021. Interest rates are at bottom levels and if an additional adjustment were to take place, it would operate via liquidity management, for which there are two programs.
    - ◆ The ECB's assets purchases. The program was just increased to €80 billion per month and the list of eligible assets extended to non-bank corporate bonds
    - ◆ The liquidity-providing operations for banks (TLTRO)
  - The ECB has created the prerequisites for a recovery and for the emergence of pressure on the productive system. This process must then be set in motion, but this is not guaranteed as demand remains very subdued
  - The Fed, which talked about a convergence towards a normal cycle in December when it hiked its interest rates, has got back to reality and there will not be any rate hikes before the summer (and probably not afterwards). According to the Fed, the domestic economy is not solid enough to absorb external shocks. That is why it remains cautious in its monetary policy management. It wants to act later rather than too soon.
  - BoE and BoJ: no changes expected

# Political risks in 2016

---

- Global economic growth is no longer strong enough to smooth over political issues
- The attention will first focus on commodity-producing countries. The fall in revenues associated with the steep and prolonged price fall will result in domestic adjustments that in all likelihood will create internal tensions. We have seen this type of phenomena in the past
- In Europe, the drastic shocks that have affected the various economies and the sluggish growth in many of them are leading to extreme voting that is likely to cause tensions in the existing European institutional framework  
In addition, the refugee issue is not solved and may be a source of significant political divergence between the countries in the Union
- The US presidential election and the strong polarisation of the potential candidates will give rise to major uncertainty in an economy that lacks robustness

# What profile in the medium term?

---

Given the factors mentioned above, there is a risk that growth may remain weak for a good while yet, with monetary policies that will accompany this slow process as is the case now.

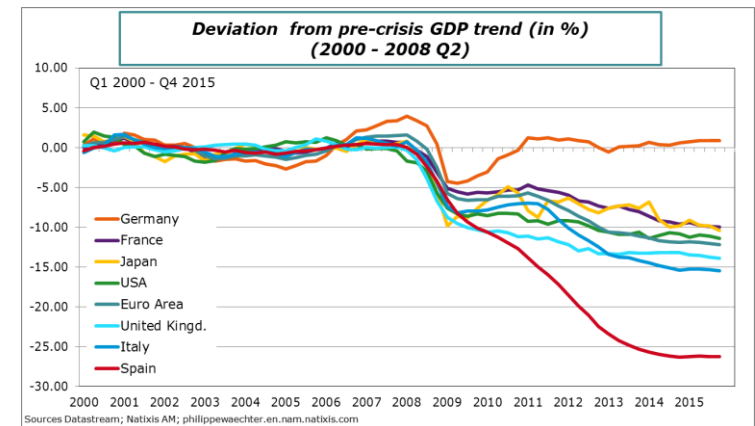
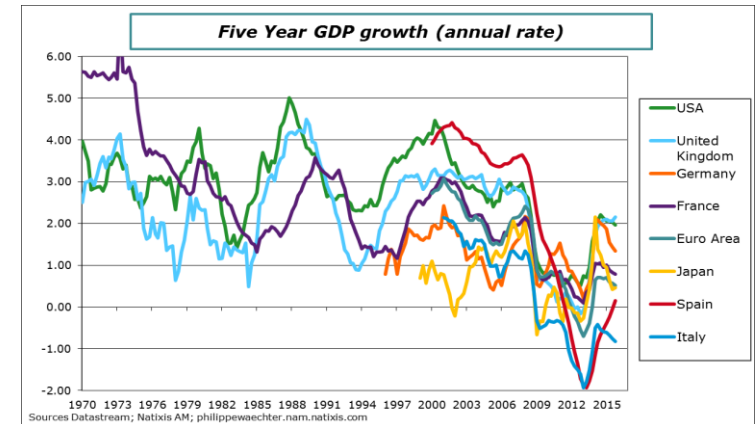
Three scenarios are nevertheless possible

- An extension of the current situation with slow growth with little job creation, especially in Europe. The risk is social and political instability. The European construction would then be weakened
- A scenario with stimulation via public investment to create momentum that could then give a greater incentive for private investment, thereby making growth more virtuous
- The third possible trajectory is the appearance, at the macroeconomic level, of the consequences of the technological revolution that started in the mid-1990s.  
This revolution, the changes from which can be seen at the microeconomic level, has not yet had any marked impact on productivity at the macroeconomic level.  
Nevertheless, we can imagine that these clusters of innovation will crystallise and end up having a perceptible macroeconomic impact. A rise in productivity would then lead to stronger growth and a more virtuous cyclical period.  
However, it is still uncertain when these impacts will appear. It may be in two, five or ten years. Will the magnitude be sufficient to create the expected disruption? Moreover, this innovation process will be on a global and no longer only on a regional scale, unlike the first two trajectories we mentioned
- The main question is whether one should wait for these innovations to appear - which is likely to happen - or whether earlier intervention is needed to avoid a risk of instability



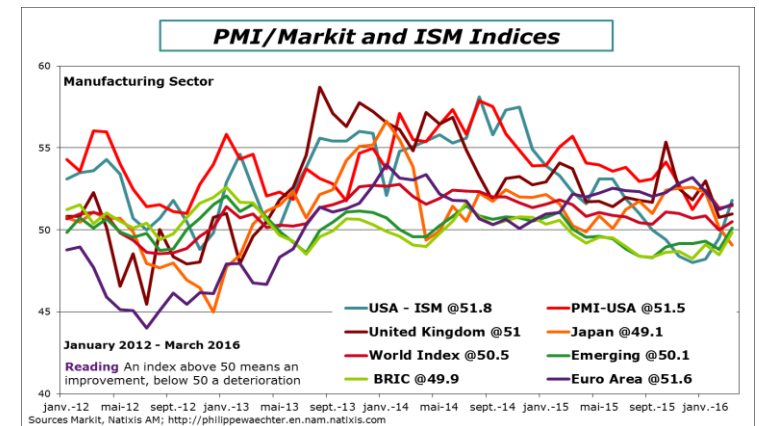
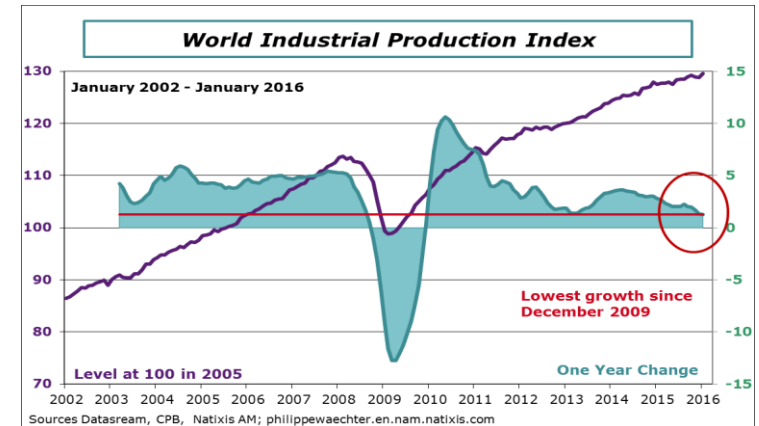
# Change of growth regime?

- On both charts we note that the growth regime is different from the pre-crisis regime, with the exception of Germany.
- The first chart shows growth over five years (now excluding the 2009 trend break). We see that the growth rate is lower everywhere and that there does not seem to be any mechanism for a return towards the pre-crisis profile.
- We note the difficult situation of Italy and Spain
- On the second chart, each country's GDP is presented as a deviation from the pre-crisis trend. We note that the 2008/2009 shock did not have any permanent impact on the German economy.
- In contrast, for the US, France, the euro zone, Italy, the United Kingdom and Japan, the deviation from the pre-crisis trend is 10 to 15%.
- The deviation is growing and the cost of the crisis is, accordingly, constantly rising. Hence the need to find an impetus that can help change these profiles. This is the challenge of economic policy.
- For Spain, the deviation is considerable: around 25%. This suggests that the pre-crisis trend was not sustainable.



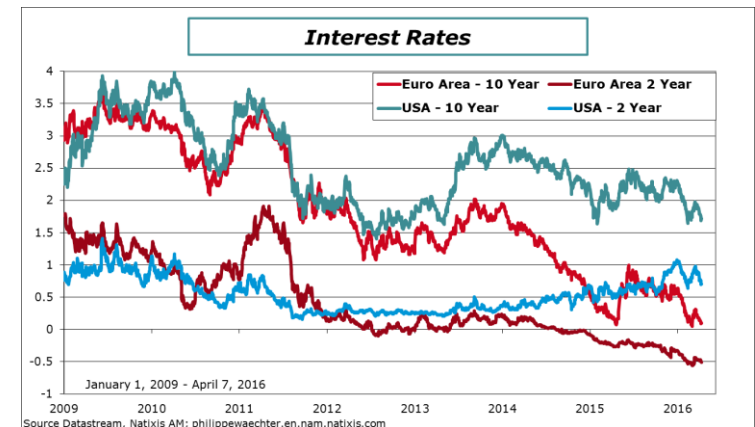
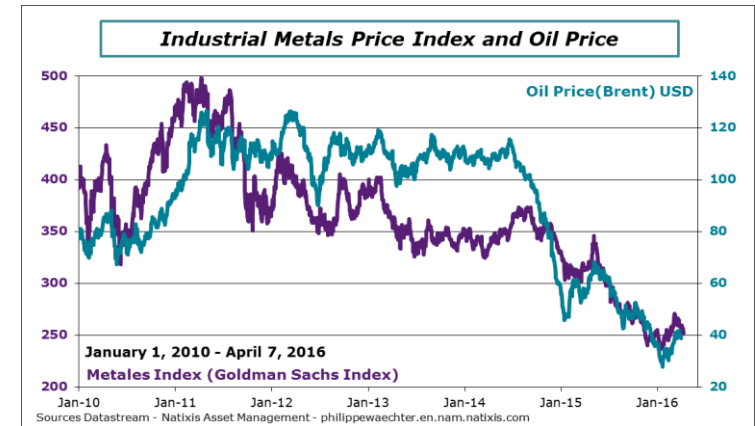
# The global economy is slowing down

- The global economy is growing slowly. In January 2016, manufacturing production rose by only 1.2%, the lowest figure since December 2009.
- This slowdown is largely due to industrialised countries, whose manufacturing activity was stable year-on-year in January.
- For emerging countries, growth is slow compared with past trends.
- This lack of support can also be noted in the very limited change in global trade. In January, it did not give any signals likely to significantly change the trajectory of the global economy
- The modest growth in activity and trade can also be seen from surveys carried out among business leaders in the manufacturing sector. The trend remains modest even though the indicators for March were a little more upbeat. That is the case in particular with the ISM survey index in the US and the Chinese index. It was close to the 50 threshold (49.7 for the private sector, but 50.2 for the official index).
- The global economic cycle remains fragile and we can understand the caution of monetary authorities and why they do not want to act too fast.



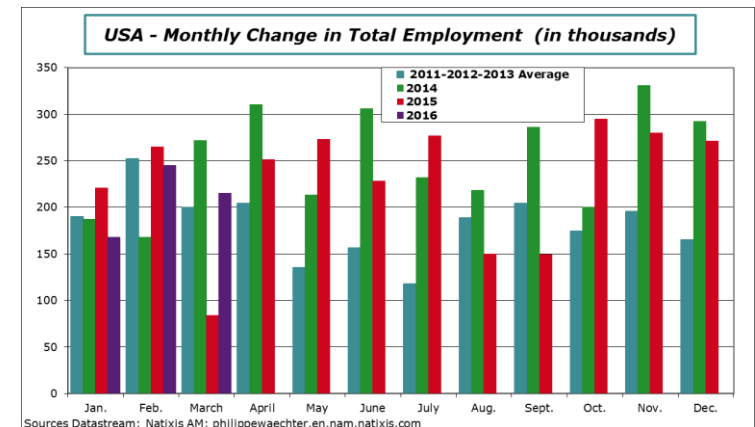
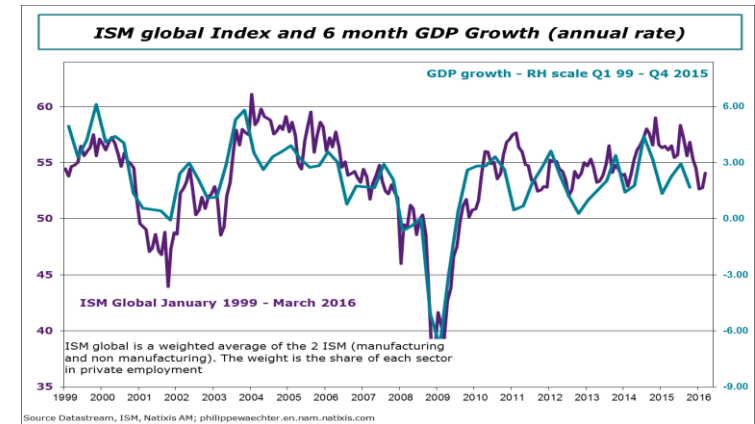
# No upward pressure on prices and interest rates

- Commodity prices remain very low in spite of a very marked rebound since the second part of January. The possibility of a sharper slowdown than expected in global activity, due to China in particular, had put the economy on alert and commodity prices adjusted downwards.
- Since then, the hope of an agreement on keeping oil production at the January 2016 level has pushed up prices. This nevertheless seems insufficient, as production remains very high everywhere. No country wants to be the first to reduce its production on a large scale. The US decline remains limited (-1.1% in February year-on-year).
- Speculative positions are now significant and explain part of the recent rise in the oil price. This may turn around rapidly as in the spring of 2015
- The persistence of excess supply is likely to result in a lower price, thereby dragging down inflation rates very far below the 2% target that central banks have set.
- As a result, interest rates will remain low for all maturities. The absence of inflation as well as central bank action point in this direction.
- It is unlikely that interest rates will rise markedly in the foreseeable future, probably not until in the early 2020s.



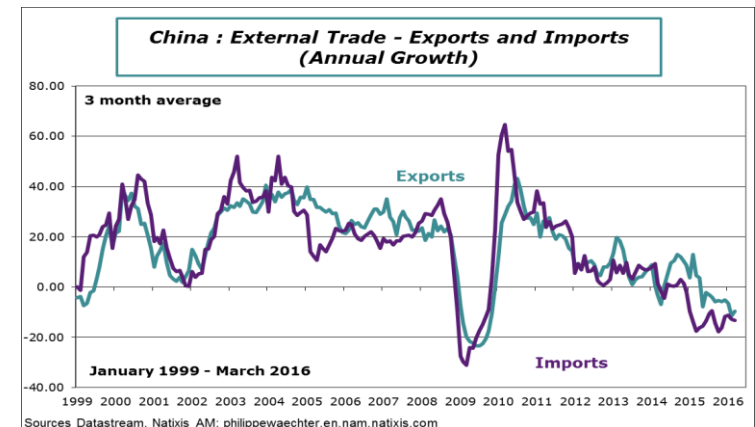
# The US economy is slowing down

- All US macroeconomic indicators reflect a slowdown in activity. Only employment points to a somewhat different conclusion. However, the pressures have been limited even in the labour market as wage rates are still not rising.
- There is nothing in wages and the capacity utilisation rate in industry that is likely to create pressures. The rebound in the composite ISM index in March is not sufficient to create or reflect strong pressure on the productive system.
- Over the first two months of 2016, capital goods orders were weaker and consumption slowed down compared with the fourth quarter of 2015.
- Inventories were rebuilt in an alarming way, breaking the downward trend in place since 1992. They have been increasing since 2015, but it is not known yet whether this reflects insufficient demand or an excessive rise in production. It is worrying in any event. This reinforces our view that the cyclical peak is behind us.
- Only employment is growing, but at a slower pace than in 2015. It will not be sufficient to propel the economy to a higher trajectory. In general, this does not happen when the economy is at full employment (which is what the 4.9% unemployment rate indicates)



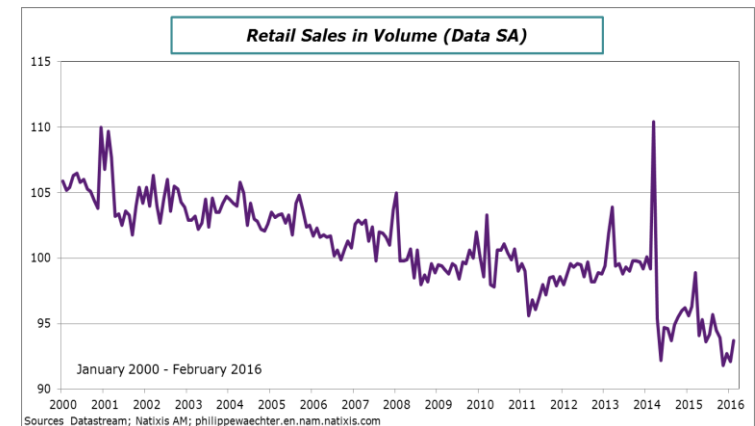
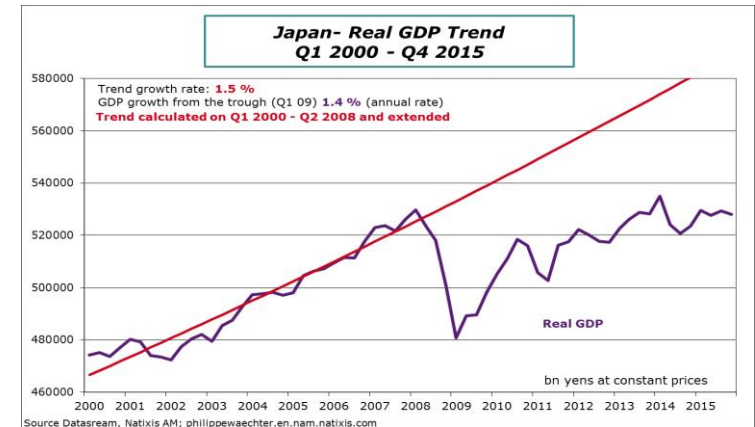
# Chinese risks that are not going away

- China has a quite simple economy after all. Its profile is a downward adjustment of growth.  
This is the result of an economy in which the weight of services is steadily increasing. As the productivity of these services is lower than in industry, this inevitably translates into a slowdown in the growth rate.  
This is a classic phenomenon that has been seen in most industrialized countries.
- The problem for China is that its debt level is high, especially among companies. As a result, the reallocation of resources in connection with the mentioned transition will be reflected by sharp fluctuations and probably sectors that will disappear. Leveraged companies, which will be at the core of this adjustment, will create a risk to the banking system.  
This is the point we have to watch as it may encourage the good companies to invest outside China.
- This process is highly detrimental for emerging countries
- Furthermore, demand for Chinese products is less vigorous; the Chinese economy cannot count on more robust external demand to save its growth.
- The governmental stimulus plans have not yet been decisive in managing activity in the short term.



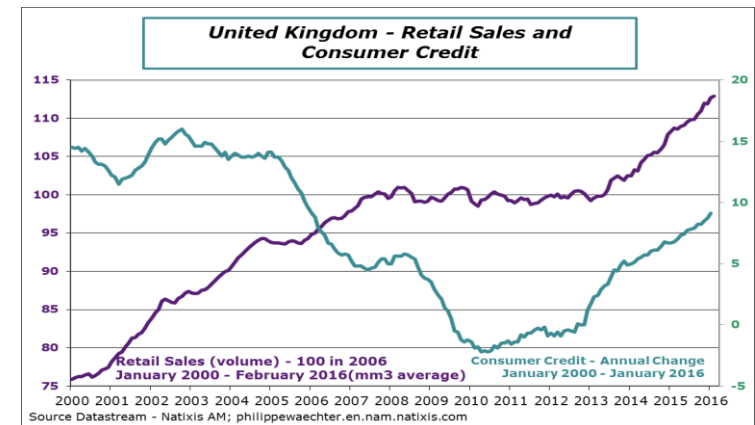
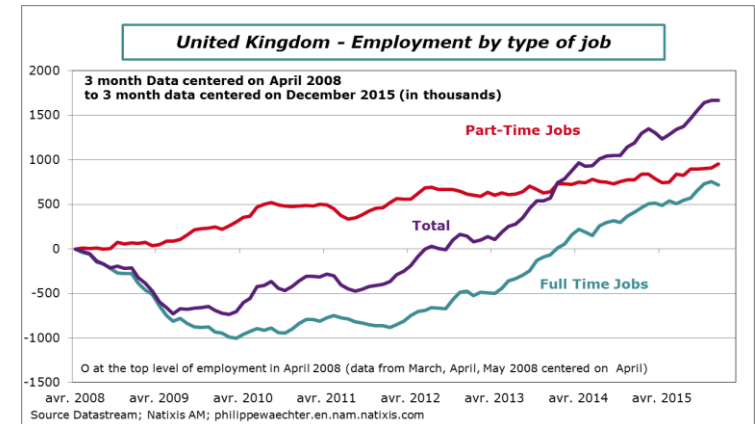
# Japan is slow in adjusting

- The Japanese economy has been in turmoil since the VAT rate increase in April 2014.
- The rebound in activity that followed Shinzo Abe's election victory vanished with the VAT hike that negatively affected households.
- They scaled back their spending drastically, and there has not been any catching-up since then.
- Households' loss of purchasing power at a time when inflation accelerated as a result of the VAT increase was such that the effect has been very persistent.
- The economy has been on a horizontal trend since then. The lack of consumer demand is hampering investment. In addition, the profile for exports is not robust given the unfavourable international environment.
- The Japanese economy is no longer growing.
- The combination of accommodating monetary and fiscal policies paved the way for vigorous growth in 2013, while the change in taxation has dampened growth.
- The possible increase in the VAT rate in April 2017 is triggering a fall in activity and an acceleration in inflation, as in 2014



# The United Kingdom remains on track

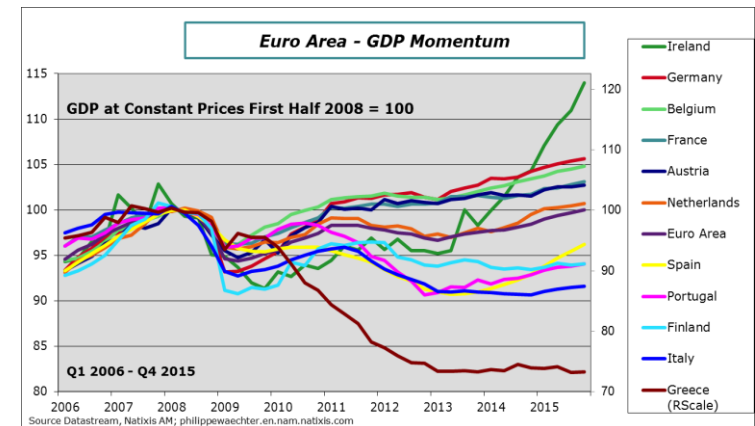
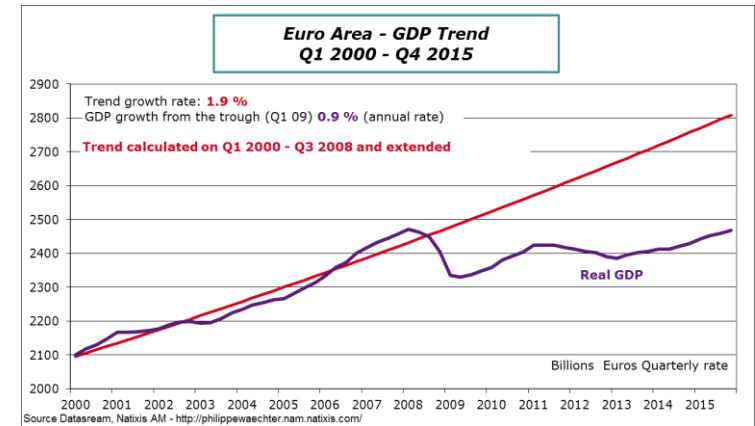
- The British economy remains on track, even though growth was somewhat less vigorous in 2015 (2.2% after 2.8% in 2014)
- The economy is mainly driven by its domestic market. That can be seen from the household spending profile in particular. Since the start of 2014, uncertainty in the labour market has decreased and household credit has picked up.
- The budgetary adjustments decided by the Cameron government also generally penalise the lowest incomes. Thanks to this pressure and the increased labour market flexibility, wage growth remains moderate, thereby limiting the risk of a spike in inflation.
- The possibility of easily finding work in an economy boosted by the City makes it possible to keep wages from rising, thereby maintaining an economy without pressures.
- The risk in 2016 is called Brexit, and the key date is 23 June. An exit from the European Union would negatively affect the City and therefore the United Kingdom as a whole.





# The euro zone is shaping up

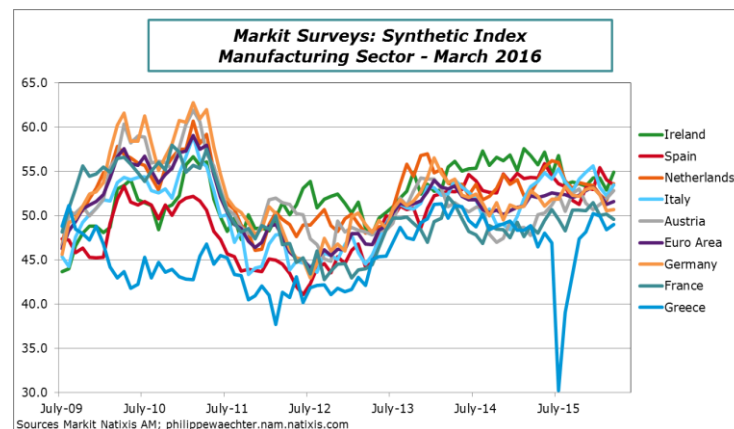
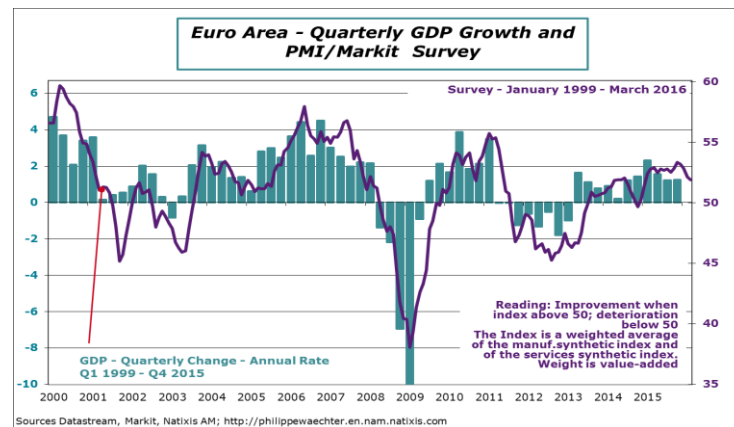
- The trajectory of the Eurozone economy has been somewhat more robust since the second half of 2014.
- This is explained by the effect of monetary policy via the ECB's interest rate cuts and the other measures it has taken. That also includes the fall in the single currency and the impact of the drop in the oil price.
- It is also explained by a less restrictive fiscal policy that tends towards neutrality. A major constraint, the one that triggered the 2011/2012 recession, has become less pronounced, thereby giving the economies additional leeway.
- Nevertheless, the divergence of the trajectories of the economies in the zone is spectacular. The desire to better synchronise the cycle between all Euro area countries in order to restore autonomy informs the policy implemented by the ECB.
- A more consistent cycle is a factor that could generate more growth in the euro zone, but the effectiveness of such a strategy suffers from the major impact of the policies conducted since 2011/2012. At the end of the day, the euro zone has not succeeded in isolating itself from external shocks





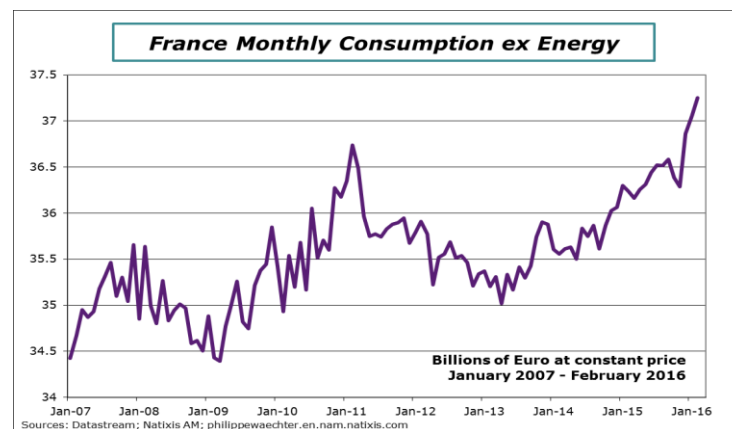
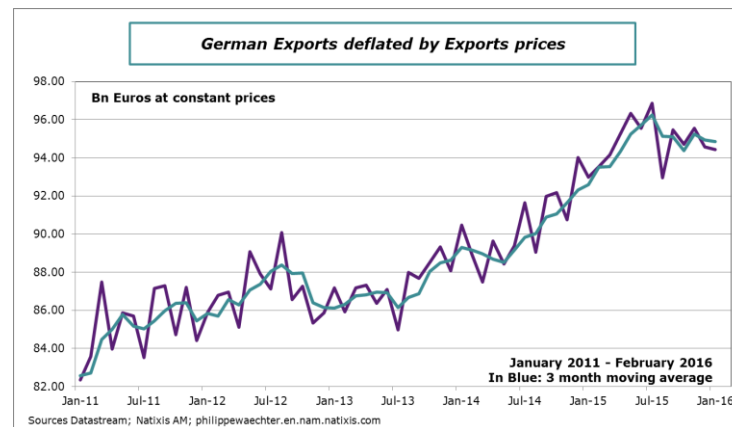
# But the peak of the cycle is perhaps not far away

- A short-term analysis of the Eurozone is worrisome.
- After the rapid rise in 2015, the activity indicators have become more unstable.
- This can be seen from the composite index of the Markit survey. After a peak in November 2015, this indicator fell rapidly, creating doubt about the capacity of the euro zone economy to post even higher growth.
- This point is crucial as it could mean that the peak of the cycle was perhaps reached in 2015/2016. This point is higher than the Eurozone's potential growth, but this situation has not created any pressure on the productive system or on prices or wages. The potential is reduced by the shortfall in 'investment, but the productive system and the labour market are not generating any pressures. It is clear that the trajectory of the euro zone economy is too low.
- The manufacturing sector indices are falling again because of the weak growth in global trade. Given the insufficient synchronisation between the cycles of the euro zone economies, it is not possible to offset this or to make the economic situation resilient to external shocks



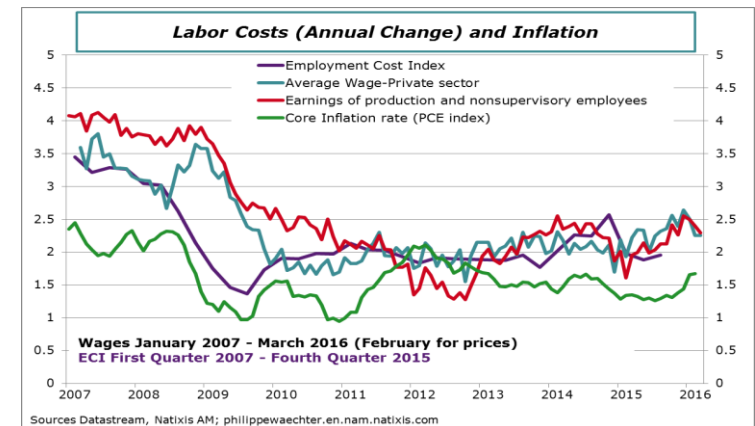
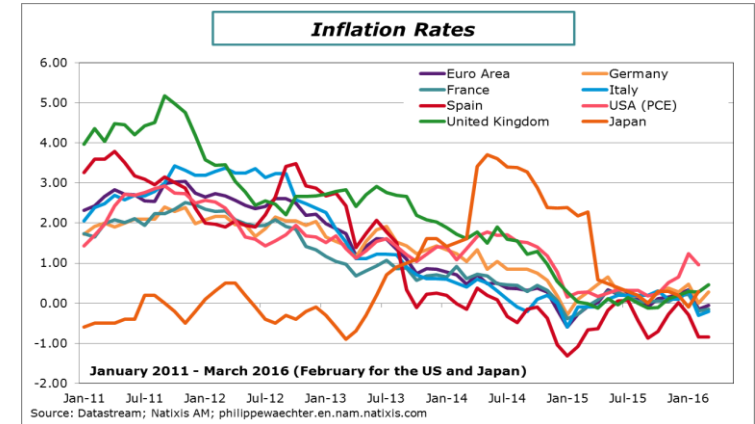
# External and internal shocks

- This lack of resilience to external shocks is explained by a more limited internal momentum, but also by a more constraining international environment.
- This can be seen from the trend in German exports in volume terms. Trade, especially with Asia, is less vigorous and is negatively affecting activity in Germany. This can be seen from on the profile of manufacturing production, which was not very positive in the second half of 2015. Nevertheless, the first figures for 2016 show an acceleration in activity in the industrial sector, probably because of very favorable weather conditions.
- In the euro zone, we also note an acceleration in household spending in France.
- The amount of purchases of goods has accelerated since December. This reflects a catching-up after the fall in the fourth quarter of 2015 and, lastly, probably an effect of the additional fall in energy prices that was passed on to household purchasing power.
- This gives the French economy a good start of the year, even though business leaders at the same time are worried about the strength of the economic cycle and its capacity to grow faster.



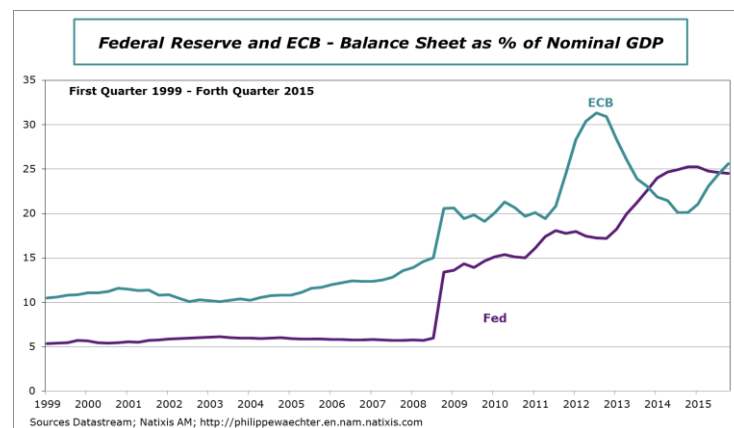
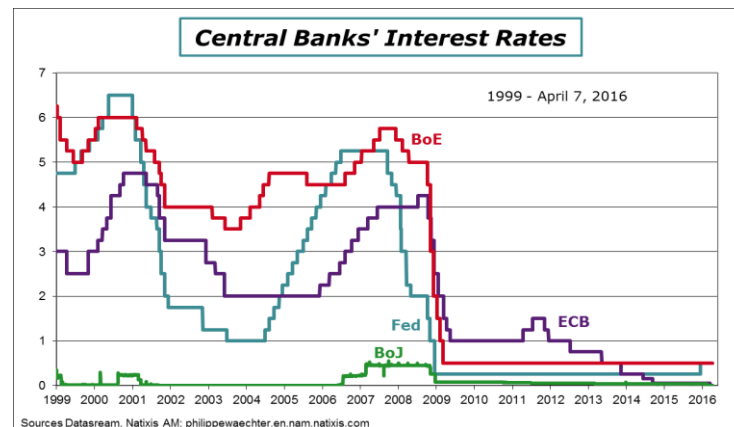
# The inflation that never appears

- The inflation rate in industrialized countries is still not a threat.
- In the first chart we note that for most of these countries, it is in the vicinity of 0%, nevertheless with a somewhat higher figure in the US and a very low figure in Spain. This largely reflects the impact of the fall in energy prices (oil).
- Its contribution is negative everywhere and this could gather momentum over the next few months, as the oil price was higher than 60 dollars in the spring of 2015. The negative impact will therefore be more pronounced.
- Nevertheless, the underlying inflation rate remains close to 1%, except in Italy where it is 0.5% and in the US where it is 1.7%. Accordingly, there are no excessive nominal pressures that could prompt central banks to act quickly.
- In the United States, the rise in the core price index mainly reflects the price of housing and healthcare. The pressure is limited as wages are hardly rising, as shown by the second chart.
- The Fed, as expressed by Janet Yellen, is not convinced that inflation will pick up significantly in 2016. The central bank prefers to act later rather than too early when it comes to inflation.



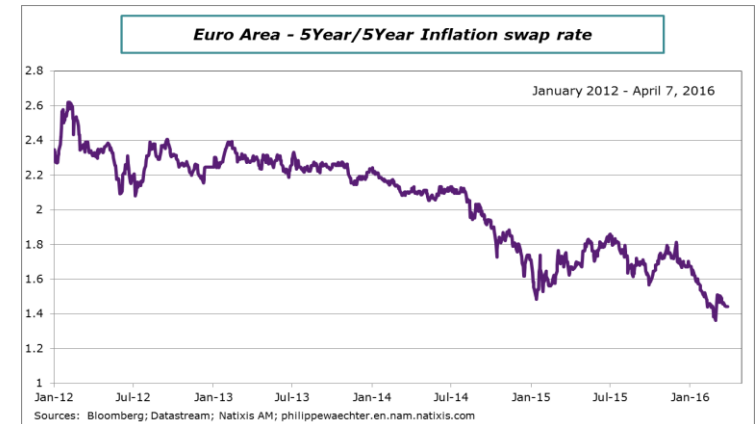
# Persistently accommodating monetary policies

- Central banks' strategy is to keep interest rates very low for an extended period. The ECB's Refi rate has been cut to 0%, Japan has cut it to -0.1% for part of the reserves (but effectively to 0%) while UK and US interest rates (since mid-December for the US) are 0.5%.
- The ECB has undertaken to maintain a liquidity providing policy until March 2021, which is the end of the TLTRO operations launched at the meeting in March and which will take place at a quarterly pace from June (for four-year operations).
- This horizon reflects the time the ECB believes is needed to strengthen the banking sector in the euro zone.
- With the quantitative easing operation, increased to €80 billion per month, the amount of the ECB's balance sheet will increase significantly. It is very likely that with these two liquidity operations, the ECB's balance sheet may exceed the 2012 peak, which was the horizon Mario Draghi defined when launching the quantitative easing program in early 2015.
- The Fed's balance sheet will continue to shrink in relation to GDP. In absolute terms, the balance sheet is growing as the Fed continues to buy assets (it buys for the amount of revenues and repayments it receives on of the securities it already holds in the portfolio). But its increase is now lower than nominal GDP growth



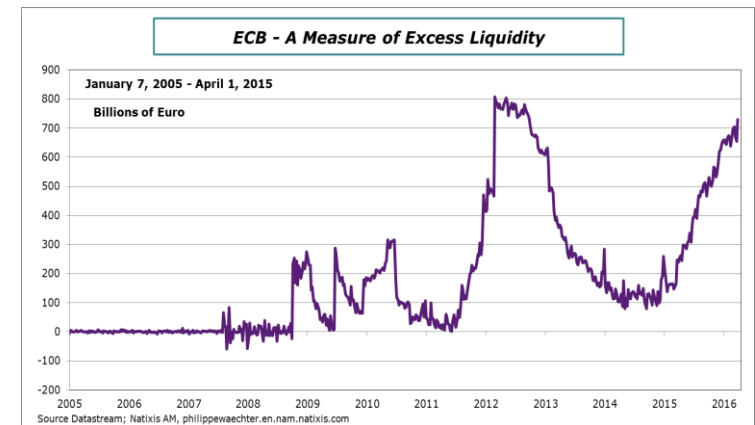
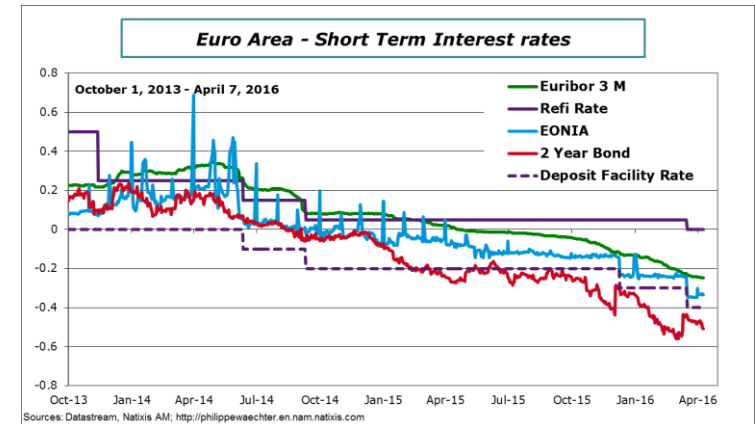
# Low inflation expectations

- Inflation expectations are low in the euro zone as well as in the United States. This can be seen in financial markets, but also among consumers. 5-year inflation expectations in the US, measured by the University of Michigan survey, and the European Commission survey show that expectations in terms of prices are very low
- This is a major point, since if inflation expectations remain low, it will not cause any additional upward pressure on interest rates. Quite the contrary, in fact.
- That is why central bankers pay great attention to this figure, and it is why one of the objectives of their communication is to reverse the current trend.
- Not to spontaneously push up interest rates, but to profoundly change the expectations of investors, business leaders and consumers by creating different expectations.
- This is why some economists (Bernanke, Krugman and Blanchard) have suggested raising central banks' inflation targets. Blanchard has recently mentioned a target of 4%.



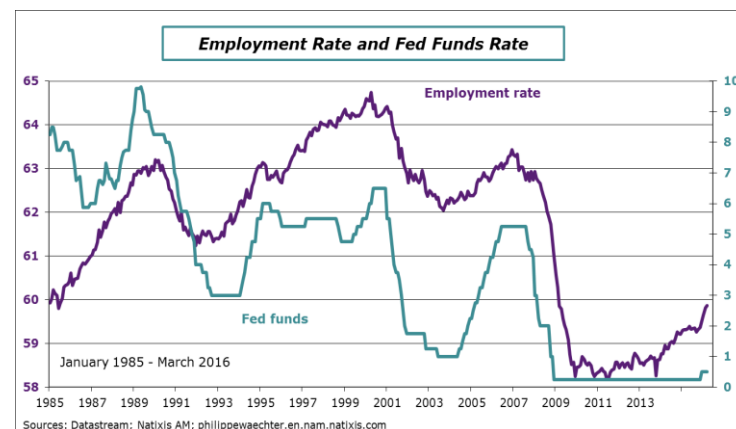
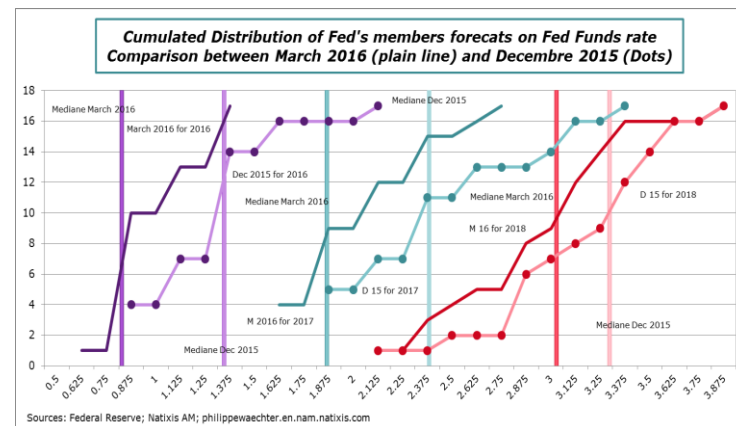
# The ECB remains on track

- The ECB has implemented a very accommodating monetary strategy. It has cut its interest rates to 0% for the Refi rate, and to -0.4% for the deposit facility rate.
- It has increased the monthly amount of its asset purchases. It is now €80 billion and also includes corporate bonds issued by non-bank companies (starting in June). Given the amount of the various governments' bond issuance, the amount of the ECB's purchases will be excessive. This will result in pressure on interest rates even though each central bank will remain very attentive to avoid creating excessive bond yield distortions (each national central bank is in charge of buying its own country's bonds). The main question in this new phase is the purchases of corporate bonds. They will have to take place in the primary market, which will make it difficult for insurance companies and asset managers as the net amounts issued remain limited. That could have a negative impact on liquidity in this market
- The TLTRO involves an exchange of assets booked in the banks' balance sheets against central bank liquidity. There will be four quarterly operations, at an interest rate on the liquidity that in the worst case will cost the banks 0% (the interest rates on this liquidity may be negative, under certain conditions, and be as low as -0.4%). The objective is to reduce the risk on the banking sector while improving the conditions for a credit recovery.



# The Fed prefers to act too late than too early

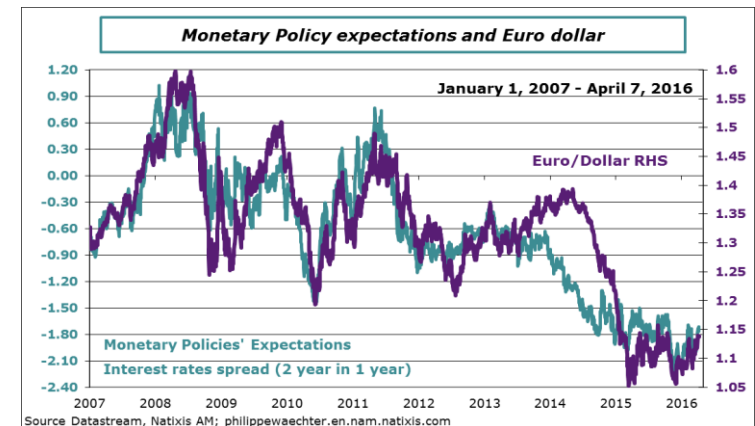
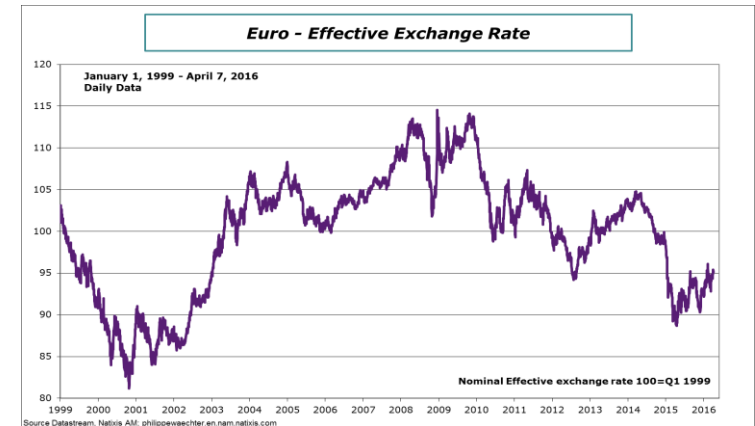
- The Federal Reserve made a U-turn in March after December's rate hike.
- At the end of 2015, the cyclical trend seemed to be robust enough to normalise the US monetary strategy. In the monetary policy committee members' projections there were up to four rate hikes in 2016.
- In March, the central bank explained that the US economy was not necessarily robust enough to absorb shocks from abroad. As a result, it preferred to maintain the status quo.
- In the first chart we see that the FOMCs projections have moved markedly to the left.
- Given the second chart, the Fed could find a reason to raise its key interest rate. This is an argument often put forward. However, the Fed will not intervene as long as inflationary pressures are limited and the imbalances in the labour market remain significant.
- The imbalance in the labour market particularly concerns the number of people who work part time, but who want to work full time. This is a factor that the Fed looks at and which undoubtedly - at least partially - explains the lack of pressure on wages





# The euro is appreciating

- Since the start of 2015, the euro has risen against the currencies of its main trading partners.
- The euro remains weak relative to the level over the last 12 years, but the downward move, the impetus that was supposed to trigger a competitiveness shock in the euro zone, is over.
- This reflects significant monetary adjustments in Japan as well as in the United Kingdom (particularly since the announcement of the referendum on the Brexit), but also in many emerging countries. We find it difficult to expect another fall in the European currency. The ECB has very clearly indicated that it will keep interest rates very low for a very a long time to come, but without this having an impact on the exchange rate. Each investor has had this profile in mind for a long time.
- As for the exchange rate between the euro and the dollar, the recent adjustment factor has been expectations about US monetary policy. For investors, the Fed's prevarications have led to the idea of a policy of interest rate increases that will be modest and not immediate.
- This change in expectations for US monetary policy has markedly changed the divergence with the expectations for the ECB's monetary policy. This is what we see on the second chart. As a result, and barring a major change, the euro's exchange rate against the dollar is correctly valued in the zone 1.1 – 1.15.





# Forecasts

	Average growth						Average Inflation					
	2012	2013	2014	2015	2016	2017	2012	2013	2014	2015	2016	2017
USA	2.2	1.5	2.4	2	1.9	1.9	1.9	1.4	1.4	0.3	1.0	1.5
Japan	1.7	1.4	-0.1	0.5	0.7	0.2	0.0	0.4	2.7	0.8	0.3	2.5
Euro Area	-0.8	-0.2	0.9	1.5	1.6	1.5	2.5	1.4	0.4	0.0	0.2	0.8
U.Kingdom	1.2	2.2	2.9	2.2	2	1.9	2.8	2.6	1.5	0.0	0.3	1.0
China	7.8	7.5	7.4	6.8	6.4	6.2	2.6	2.6	2.0	1.4	1.3	1.3
France	0.6	0.4	0.2	1.2	1.3	1.2	2.0	0.9	0.5	0.0	0.2	0.8

Year end	Monetary Policy						Long Term Interest Rates (10 year)					
	2012	2013	2014	2015	2016	2017	2012	2013	2014	2015	2016	2017
USA	0-0.25	0-0.25	0-0.25	0.25-0.5	0.50-0.75	1.25-1.50	1.7	3	2.2	2.27	1.6-2.00	2.0-2.50
Japan	0.1	0.1	0.1	0.1	-0.1	-0.1	0.8	0.7	0.3	0.25	-0.1; 0.3	-0.1; 0.3
Euro Area	0.75	0.25	0.05	0.05	0.05	0	1.2	1.95	0.5	0.63	0.2-0.6	0.2-0.6
U.Kingdom	0.5	0.5	0.5	0.5	0.5	0.5	1.8	3.1	1.8	1.96	1.3-1.6	1.3-1.60

Source: Natixis Asset Management  
Economic research

No acceleration in growth expected in 2016 or 2017 in the main developed countries. Chinese growth will continue to slow down given the transition mentioned in the main text. In Japan, there will be another VAT increase in April 2017 which will result in a turnaround in activity and a rise in inflation. I make the assumption that there will be no Brexit.

Inflation rates are reduced in 2016 by the effect of a low oil price, and in 2017 the small rise reflects a neutral contribution from energy.

The Fed will raise its key interest rate once this year, at the most, and twice next year. Status quo elsewhere. Long-term interest rates will remain very low, reflecting still very abundant savings.

# Legal information

## Natixis Asset Management

Registered Office: 21 quai d'Austerlitz – 75 634 Paris Cedex 13 – Tel. +33 1 78 40 80 00  
Limited Liability Company – Share Capital of 50 434 604,76 euro  
Regulated by AMF under n° GP 90-009  
RCS number 329 450 738 Paris

This document is destined for professional clients. It may not be used for any purpose other than that for which it was conceived and may not be copied, diffused or communicated to third parties in part or in whole without the prior written authorization of Natixis Asset Management.

None of the information contained in this document should be interpreted as having any contractual value. This document is produced purely for the purposes of providing indicative information. It constitutes a presentation conceived and created by Natixis Asset Management from sources that it regards as reliable.

Natixis Asset Management reserves the right to modify the information presented in this document at any time without notice and particularly the information concerning the description of the management processes which does not in any way constitute a commitment on behalf of Natixis Asset Management.

Natixis Asset Management will not be held responsible for any decision taken or not taken on the basis of information contained in this document, nor in the use that a third-party may make of it.

Figures mentioned refer to previous years. Past performance does not guarantee future results. Reference to a ranking and/or a price does not indicate the future performance of the UCITS or the fund manager.

The funds mentioned in this document have received the approval of the French Financial Market Authority (AMF) or have received authorization to be marketed in France. The risks and costs related to investment in a fund are described in the fund's prospectus. The prospectus and the periodical reports are available on request from Natixis Asset Management. Potential subscribers must be in possession of a copy of the prospectus before making any subscription.

In the case of funds that qualify for a special tax status, we remind potential investors that the special tax conditions depend on the individual situation of each client and that such conditions may be subject to future modification.

Under Natixis Asset Management's social responsibility policy, and in accordance with the treaties signed by the French government, the funds directly managed by Natixis Asset Management do not invest in any company that manufactures sells or stocks anti-personnel mines and cluster bombs.

The analyses and opinions referenced herein represent the subjective views of the author(s) as referenced, are as of the date shown and are subject to change. There can be no assurance that developments will transpire as may be forecasted in this material.

This material is provided only to investment service providers or other Professional Clients or Qualified Investors and, when required by local regulation, only at their written request. • **In the EU (ex UK)** Distributed by NGAM S.A., a Luxembourg management company authorized by the CSSF, or one of its branch offices. NGAM S.A., 2, rue Jean Monnet, L-2180 Luxembourg, Grand Duchy of Luxembourg. • **In the UK** Provided and approved for use by NGAM UK Limited, which is authorized and regulated by the Financial Conduct Authority. • **In Switzerland** Provided by NGAM, Switzerland Sàrl. • **In and from the DIFC** Distributed in and from the DIFC financial district to Professional Clients only by NGAM Middle East, a branch of NGAM UK Limited, which is regulated by the DFSA. Office 603 – Level 6, Currency House Tower 2, P.O. Box 118257, DIFC, Dubai, United Arab Emirates. • **In Singapore** Provided by NGAM Singapore (name registration no. 5310272FD), a division of Absolute Asia Asset Management Limited, to Institutional Investors and Accredited Investors for information only. Absolute Asia Asset Management Limited is authorized by the Monetary Authority of Singapore (Company registration No. 199801044D) and holds a Capital Markets Services License to provide investment management services in Singapore. Registered office: 10 Collyer Quay, # 14-07/08 Ocean Financial Centre. Singapore 049315. • **In Hong Kong** Issued by NGAM Hong Kong Limited. • **In Taiwan:** This material is provided by NGAM Securities Investment Consulting Co., Ltd., a Securities Investment Consulting Enterprise regulated by the Financial Supervisory Commission of the R.O.C and a business development unit of Natixis Global Asset Management. Registered address: 16F-1, No. 76, Section 2, Tun Hwa South Road, Taipei, Taiwan, Da-An District, 106 (Ruentex Financial Building 1), R.O.C., license number 2012 FSC SICE No. 039, Tel. +886 2 2784 5777. • **In Japan** Provided by Natixis Asset Management Japan Co., Registration No.: Director-General of the Kanto Local Financial Bureau (kinsho) No. 425. Content of Business: The Company conducts discretionary asset management business and investment advisory and agency business as a Financial Instruments Business Operator. Registered address: 2-2-3 Uchisaiwaicho, Chiyoda-ku, Tokyo. • **In Latin America (outside Mexico)** This material is provided by NGAM S.A. • **In Mexico** This material is provided by NGAM Mexico, S. de R.L. de C.V., which is not a regulated financial entity or an investment advisor and is not regulated by the Comisión Nacional Bancaria y de Valores or any other Mexican authority. This material should not be considered investment advice of any type and does not represent the performance of any regulated financial activities. Any products, services or investments referred to herein are rendered or offered in a jurisdiction other than Mexico. In order to request the products or services mentioned in these materials it will be necessary to contact Natixis Global Asset Management outside Mexican territory.

The above referenced entities are business development units of Natixis Global Asset Management, the holding company of a diverse line-up of specialised investment management and distribution entities worldwide. Although Natixis Global Asset Management believes the information provided in this material to be reliable, it does not guarantee the accuracy, adequacy or completeness of such information.

> Further information: [www.nam.natixis.com](http://www.nam.natixis.com)