## Missing deflation — unique to America?

By <u>Paul Hubert</u>, <u>Mathilde Le Moigne</u>

Was the way inflation unfolded after the 2007-2009 crisis atypical? According to Paul Krugman: "If inflation [note: in the United States] had responded to the Great Recession and aftermath in the same way it did in previous big slumps, we would be deep in deflation by now; we aren't." Indeed, after 2009, inflation in the United States remained surprisingly stable given actual economic developments. Has this phenomenon, which has been described as "missing deflation", been observed in the euro zone?

Despite the deepest recession since the 1929 crisis, the inflation rate remained stable at around 1.5% on average between 2008 and 2011 in the United States, and 1% in the euro zone. Does this mean that the Phillips curve, which links inflation to real activity, has lost its empirical validity? In a note in 2016, Olivier Blanchard recalls on the contrary that the Phillips curve, in its simplest original version, remains a valid instrument for understanding the links between unemployment, despite this "missing inflation and disinflation". Blanchard notes, however, that the link between the two variables has weakened because inflation increasingly dependent on expectations of inflation, which are themselves anchored in the US Federal Reserve's inflation target. In their 2015 article, Coibion ∏∏and Gorodnichenko explain the missing deflation in the United States by the fact that inflation expectations tend to be influenced by the most visible price changes, such as changes in the price of a barrel of oil. Since 2015, we have seen a drop in inflation expectations concomitant with the decline in oil prices.

The difficulty in accounting for recent changes in inflation

by using the Phillips curve led us in a <u>recent article</u> to evaluate its potential determinants and to consider whether the euro zone has also experienced a phenomenon of "missing deflation". Based on a standard Phillips curve, we did not find the conclusions of Coibion and Gorodnichenko when we consider the euro zone as a whole. In other words, real activity and inflation expectations give a good description of the way inflation is behaving.

This result seems to come, however, from a bias in aggregation between national inflation behaviours in the euro zone. In particular, we find a notable divergence between the countries of northern Europe (Germany, France), which show a general tendency towards missing inflation, and the more peripheral countries (Spain, Italy, Greece), which are exhibiting periods of missing deflation. This divergence nevertheless shows up from the beginning of our sample, that is to say, in the first years when the euro zone was created, and seems to be absorbed from 2006, without undergoing any notable change during the 2008-2009 crisis.

In contrast to what happened in the United States, it seems that the euro zone did not experience missing deflation as a result of the 2008-2009 economic and financial crisis. On the contrary, it seems that divergences in inflation in Europe predate the crisis and tended to be absorbed by the crisis.

## La désinflation manquante

# est-elle un phénomène américain uniquement ?

par <u>Paul Hubert</u>, <u>Mathilde Le Moigne</u>

La dynamique de l'inflation après la crise de 2007-2009 estelle atypique ? Selon Paul Krugman : « si la réaction de l'inflation (ndlr : aux Etats-Unis) avait été la même à la suite de la Grande Récession que lors des précédentes crises économiques, nous aurions dû nous trouver aujourd'hui en pleine <u>déflation</u>... Nous ne le sommes pas. » En effet, après 2009, l'inflation aux Etats-Unis est demeurée étonnamment stable au regard de l'évolution de l'activité réelle. Ce phénomène a été qualifié de « désinflation manquante ». Un tel phénomène s'observe-t-il dans la zone euro ?

En dépit de la plus grande récession depuis la crise de 1929, le taux d'inflation est resté stable autour de 1,5% en moyenne entre 2008 et 2011 aux Etats-Unis, et de 1% en zone euro. Estce à dire que la courbe de Phillips, qui lie l'inflation à l'activité réelle, a perdu toute validité empirique ? Dans une note de 2016, Olivier Blanchard rappelle au contraire que la courbe de Phillips, dans sa version originelle la plus simple, reste un instrument valable pour appréhender les liens entre inflation et chômage, et ce en dépit de cette « désinflation manquante ». Il note cependant que le lien entre les deux variables s'est affaibli parce que l'inflation dépend de plus en plus des anticipations d'inflation, elles-mêmes ancrées à la cible d'inflation de la Réserve fédérale américaine. Dans leur <u>article</u> de 2015, Coibion et Gorodnichenko expliquent cette désinflation manquante aux Etats-Unis par le fait que les anticipations d'inflation sont plutôt influencées par les variations des prix les plus visibles, comme par exemple les variations du prix du baril de pétrole. On observe d'ailleurs baisse des 2015 une anticipations d'inflation concomitante à la baisse des prix du pétrole.

La difficulté à rendre compte de l'évolution récente de l'inflation, au travers de la courbe de Phillips, nous a conduits à évaluer, dans un <u>récent article</u>, ses déterminants potentiels et à examiner si la zone euro a également connu un phénomène de « désinflation manquante ». Sur la base d'une courbe de Phillips standard, nous ne retrouvons par les conclusions de Coibion et Gorodnichenko lorsque l'on considère la zone euro dans sa totalité. Dit autrement, l'activité réelle et les anticipations d'inflation décrivent bien l'évolution de l'inflation.

Cependant, ce résultat semble provenir d'un biais d'agrégation entre les comportements d'inflation nationaux au sein de la zone euro. En particulier, nous trouvons une divergence notable entre les pays du nord de l'Europe (Allemagne, France), exhibant une tendance générale à une *inflation manquante*, et les pays davantage à la périphérie (Espagne, Italie, Grèce) exhibant des périodes de *désinflation manquante*. Cette divergence apparaît néanmoins dès le *début* de notre échantillon, c'est-à-dire dans les premières années de la création de la zone euro, et semble se résorber à partir de 2006, sans changement notable au cours de la crise de 2008-2009.

Contrairement à ce qui s'est produit aux États-Unis, il apparaît que la zone euro n'a pas connu de désinflation manquante à la suite de la crise économique et financière de 2008-2009. Il semble au contraire que les divergences d'inflation en Europe sont antérieures à la crise, et tendent à se résorber avec la crise.

# Is missing disinflation a uniquely American phenomenon?

By Paul Hubert, Mathilde Le Moigne

Are the dynamics of inflation after the 2007-2009 crisis atypical? According to Paul Krugman, "If inflation had responded to the Great Recession and aftermath the way it did in previous big slumps, we would be deep in <u>deflation</u> by now; we aren't." In fact, after 2009, inflation in the US has remained surprisingly stable in terms of changes in real activity. This phenomenon has been called "missing disinflation". Can a phenomenon like this be seen in the euro zone?

Despite the worst recession since the 1929 crisis, the inflation rate has remained stable at around 1.5% on average between 2008 and 2011 in the US and 1% in the euro zone. Does this mean that the Phillips curve, which links inflation to real activity, has lost its empirical validity? In a note in 2016, Olivier Blanchard argued instead that the Phillips curve, in its simplest original version, is still a valid instrument for understanding the relationship between inflation and unemployment, in spite of this "missing disinflation".

Blanchard nevertheless noted that the relationship between the two variables has weakened, because inflation increasingly depends on inflation expectations, which are themselves anchored to the inflation target of the US Fed. In an article in 2015, Coibion and Gorodnichenko explained this missing disinflation in the US by the fact that inflation expectations are influenced by variations in the most visible prices, such as fluctuations in the price of oil. Furthermore, since 2015 inflation expectations have declined concomitantly with oil prices.

The difficulty of accounting for recent trends in inflation through the Phillips curve led us to evaluate its potential determinants in a <u>recent working paper</u> and to consider whether this "missing disinflation" phenomenon was also present in the euro zone. Based on a standard Phillips curve, we did not come up with the results of Coibion and Gorodnichenko when the euro zone was considered in its entirety. In other words, real activity and inflation expectations do describe changes in inflation.

However, this result appears to come from an aggregation bias between the behaviours of national inflation within the euro zone. In particular, we found a significant divergence between the countries of Northern Europe (Germany, France), which demonstrate a general tendency towards missing inflation, and countries on the periphery (Spain, Italy, Greece), which exhibit periods of missing disinflation. This divergence nevertheless appears right from the start of our sample, that is to say, in the early years of the creation of the euro zone, and seems to reverse around 2006, without any significant change during the crisis of 2008-2009.

Unlike what happened in the US, it appears that the euro zone has not experienced missing disinflation as a result of the economic and financial crisis of 2008-2009. It seems instead that divergences in inflation in Europe preceded the crisis, and tended to subside with the crisis.

### Wage moderation in Germany -

## at the origin of France's economic difficulties

By Xavier Ragot, President of the OFCE, CNRS-PSE, together with Mathilde Le Moigne, ENS

If the future of the euro zone does indeed depend on political cooperation between France and Germany, then economic divergences between the two countries should be a cause for concern. These divergences need to be analysed, with particular attention to three specific areas: the unemployment rate, the trade balance and the public debt. Germany's unemployment rate is falling steadily; in June it was under the 5% mark, which represents almost full employment, whereas the French rate is over 10%. Germany's low unemployment rate does not however reflect strong consumption by German households, but rather the country's export capacity. While France continues to run a negative trade balance (importing more than it exports), Germany is now the world's leading exporter, ahead of China, with a trade surplus that will run close to 8% in 2015. As for the public deficit, it will be around 3.8% in France in 2015, while Germany is now generating a surplus. This has impressive consequences for the way the public debt is changing in the two countries. In 2010 they were similar, at around 80% of GDP, but in 2014 Germany's public debt fell below 75%, and is continuing to decline, while France's debt has continued to grow, and has now hit 97%. This kind of gap is unprecedented in recent times, and is fraught with mounting tension over the conduct of monetary policy.

This triple divergence is inevitably leading to differences in the political response, with respect to the population's ability to take in migrants and to the understanding of countries facing economic difficulties, such as Greece, but also with respect to the ability to cope with future economic crises. Economic divergence will become political divergence. The point is not to idealize the German situation, which is characterized by a large number of workers who have failed to benefit from the fruits of growth, as is shown in a recent study by France Stratégie, as well as by a rapid decline in population. This should not stop us from taking a hard look at the economic gap arising between the two countries.

### What are the reasons for Germany's commercial success?

Many factors have been advanced to explain the divergence between the two neighbours: for some, it's a matter of the German strategy — outsourcing value chains, aggressive wage moderation, fostering competition between companies — and for others, French weaknesses: poor geographical and / or sectoral specialization, insufficient public support for exporters, and a lack of competition in certain sectors. Our recent study emphasizes the delayed impact of German wage moderation and suggests that this could explain almost half of the Franco-German divergence. To understand the mechanisms involved, it is necessary to distinguish between the sectors exposed to international competition and the sectors that are sheltered. The exposed sectors include industry, but also agriculture, including animal husbandry, which is currently in the news, and some services that can be traded. The sheltered sector includes transportation, real estate, retailing and a large part of personal services.

While unit labour costs in France have risen regularly and at similar levels in the two above-mentioned sectors, they have remained extraordinarily stable in Germany for nearly ten years. This wage moderation is the result of both poor management of German reunification, which tipped the balance of power during wage negotiations in favour of employers, and, to a much less extent, the introduction of the Hartz reforms in 2003-2005, which aimed to create low-paid work in the less competitive sectors (particularly the sheltered sector). The cost of German reunification is estimated at 900 billion

euros, in terms of transfers from former West Germany, or slightly less than three times the Greek debt. Faced with this kind of challenge, the wage moderation initiated in 1993 represented a strategy for re-convergence between the two parts of Germany. In 2012, German nominal wages were 20% lower than French wages in the exposed (tradable) sector and 30% lower in the sheltered sector, compared to the 1993 levels. A look at French and German margin levels shows that in the exposed sector, French exporters have made significant efforts by reducing their margins in order to maintain their price competitiveness. In the sheltered sector, French margins are on average 6% higher than German margins. The bulk of France's loss of price competitiveness is therefore a loss of cost competitiveness.

How much have these differences contributed to unemployment and the trade balance in the two countries? Our quantitative analysis shows that if German wage restraint had not taken place between 1993 and 2012, today's 8% gap in the trade balances would instead be 4.7% (2.2% of this being due solely to German wage moderation in the sheltered sector). Thus, Germany's wage moderation policy explains almost 40% of the difference in trade performance between the two countries. We also found that this wage moderation accounts for more than 2 points of France's unemployment.

#### The non-price competitiveness gap

This leaves nearly 60% of the difference in the trade balances still needing to be explained. Our study suggests that this difference is due to the quality of the goods produced, so-called non-price competitiveness. Between 1993 and 2012, the German quality-price ratio increased by around 19% compared with that of France, which has therefore more than offset the rise in German export prices relative to French prices. There is clearly a "quality" effect in this non-price competitiveness: Germany produces "high end", more innovative goods than France does in the same sectors. It is also

possible to see an impact due to the outsourcing of some German production (nearly 52% of production volume in 2012) to countries where costs are lower: Germany today is a centre for design and assembly, which saves money on its intermediary costs, enabling it to invest more in brand strategies and efforts to move upscale.

This effect is nevertheless probably endogenous, that is to say, it flows in part from Germany's advantage in cost competitiveness. Low labour costs have enabled German exporters to maintain their margins in the face of external competition. The funds generated have led to investments which French companies have probably had to forego in order to maintain their price-competitiveness, thus losing the opportunity to catch up with German products in terms of non-price competitiveness over the longer term.

#### A positive way out and up

The root cause of the gap in economic performance between Germany and France lies in the nominal divergence observed between the two countries since the early 1990s. One way to reduce these differences would be to promote convergence in wages in Europe and in its labour markets more generally. Germany would need to allow wage inflation that was higher than in the periphery countries, thereby dealing with the increase in social inequalities in Germany, while France must not fall into the trap of competitive deflation, which would destroy its domestic demand, while keeping wage movements under control. In this respect, the report of the five Presidents presented by the European Commission on 22 June 2015 proposes the establishment of national competitiveness authorities, which hopefully would allow greater cooperation on social welfare and employment.

The difference in wages between France and Germany has profound implications in terms of economic thought. The increased trade integration that followed the introduction of

the euro led not to a convergence but to a divergence in labour markets. It is then up to each State to once again bring about convergence of the economies while supporting economic activity. This State intervention in the economy is more complex than the simple Keynesian framework for the management of aggregate demand, and now involves the convergence of labour markets. Heretofore, Europe's response has been systematic cuts in labour costs, while what is really needed is to increase wages in surplus countries, such as Germany, for example by using the minimum wage as a tool. All this, it is true, is economics. The politics begins when we realize that only long-term cooperation can bring about a convergence in national interests.