ALLIANZ RESEARCH

INFLATION: BACK TO THE 1970s?

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EULER HERMES

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- The immediate impact of the Covid-19 shock on inflation has been decidedly deflationary, but in light of the brewing cocktail of post-pandemic economic trends, the probability of an inflationary overshoot has also risen. In fact, ambivalent market signals suggest that participants are pricing in a higher risk of extreme inflation scenarios – on both the downside as well as the upside.

- In our base case, we see the inflation outlook moving through three phases of varying supply and demand pressures: 1) Messy data in the immediate crisis aftermath; 2) A disinflationary recovery in 2021 (U.S.: +1.6%, Eurozone: +0.9%) due to substantial slack in the economy and a swift rebound in supply; 3) A temporary inflation overshoot in 2022 (U.S.: 2.1%, Eurozone: 1.2%) following a recovery to pre-crisis activity amid gradual supply headwinds but no policy paradigm change on wages or fiscal and monetary policy .

- What would it take for a scenario of persistently high inflation (probability: 15%) to materialize? We see a risk that supply-side issues, including rising unit labor costs amid weak productivity growth and the extent of the economy's longer-lasting scarring, could be underestimated. While a 1970s wage-price spiral would be difficult to imagine, given labor unions' loss of influence, a push for higher wages and more redistribution amid heightened social discontent, together with more state intervention in economic affairs and rising protectionist tendencies, could well exacerbate prevailing supply bottlenecks and lead to a notable and persistent acceleration in inflation. In such a situation, central bank complacency should be particularly monitored. Central banks could indeed be reluctant to engage in an abrupt and aggressive policy U-turn to rein in inflation given (i) a 'recency' bias towards a long period of subdued inflation, coupled with (ii) the U.S. Federal Reserve's recent strategy switch to Average Inflation Targeting (AIT) and (iii) the fear of a major market tantrum. Under such circumstances, our model on long-term inflation projections suggests that inflation could reach 6.2% in the U.S., compared to 4.5% in the Eurozone, by 2024.

QUO VADIS INFLATION?

Following the unprecedented shock experienced earlier this year, the global economy has embarked on an uneven recovery path. But even once GDP recovers to pre-crisis levels, which we don't expect to happen before 2022, the global economy will have to deal with permanent scarring effects, including lower potential growth, higher debt levels, a larger role of the state in economic affairs and a closer cooperation between fiscal and monetary policy. Regarding inflation, the verdict is still out. In the immediate aftermath of the economic shock, inflation rates across most OECD countries have declined to near zero, but what is the risk that the cocktail of post-pandemic economic trends rings in the end of the low inflation era?

Ambivalent market signals

In the wake of the Covid-19 crisis, three recent market developments have (re)ignited a discussion over the inflation outlook. First, inflation expectations – as measured by the breakeven rate on 10-year U.S. TIPS[1] – have risen by 110bp from a year-low of 0.51% to 1.61% (inflation swaps convey the same information). Second, the price of oil (WTI[2]) has jumped from a year-low of USD8.9/bbl to USD40.45/bbl. Third, the price of gold has risen to new record highs in all major currencies: USD1,869.90, but also EUR1,605.75 and JPY197,508.27. Yet, these increases need to be put into perspective, as they came after sharp declines caused by the Covid-19 crisis.

At 0.5% on 19 March, market-based inflation expectations were excessively depressed relative to the long-term equilibrium value (1.55%), which we estimate based on the perceived rate of U.S. inflation (2.3%). The labor market (represented by the ISM employment index) and the oil price drive the short-term deviations from this long-term anchor. The reversion to fair value seen since March can be explained by the rebound of the ISM employment index from 27.5 in April to 46.4 in August, as well as by the recovery in the oil price. In contrast, the Philadelphia Fed's Survey of Professional Forecasters shows that they have cut their 10-year annual-average of headline CPI inflation forecast by about 20bps to 2.03%. If anything, this move was overdue, given the recent behavior of observed inflation and its impact on the perceived rate of inflation.

Figure 1: Market-based inflation bellwethers

	Latest (28/09/2020)	Year low	Year High	End 2019
US 10-year inflation break even (%)	1.61	0.51	1.80	1.77
US 10-year real rate (%)	-0.94	-1.08	0.62	0.15
USD 10-year inflation swap (%)	1.87	0.69	2.03	1.98
€ 10-year inflation swap (%)	0.86	0.40	1.21	1.18
WTI (USD)	40.45	8.9	63.29	61.08
Gold (USD)	1,869.90	1,475.03	2,052.50	1,520.50
Gold (EUR)	1,605.75	1,348.68	1,733.09	1,354.57

Sources: Refinitiv, Allianz Research.

1 TIPS: Treasury Inflation Protected Securities
2 WTI: West Texas Intermediate

Meanwhile the oil price reached its nadir on 21 April 2020 at USD8.9/bbl for the WTI and USD16.50/bbl for the Brent (in intraday trading, the spot WTI even fell to minus USD37.63/bbl on 20 April). Of late, the oil market has taken comfort from the fall in U.S. inventories, albeit this was to be expected at this time of the year. Of more long-term significance is the sharp downward adjustment in the Baker Hughes U.S. rig count, which indicates some over-reaction on the part of producers to the fall in the oil price. In comparison, the CRB index, a broad basket of commodities, has rebounded by only 27.7% since its year-low, i.e. much less than oil (copper is up 'only' 41.8%).

The rise in the price of gold, meanwhile, which according to conventional wisdom is a hedge against inflation, should set off the inflation alarm: it has increased by 26.8% since 19 March 2020 (and this all the more so that gold mines have almost doubled during the same period). However, a careful examination of history shows that gold also performs well during periods of deflation or very high uncertainty. This is because gold is an 'outside asset': it is not a liability for anyone 'inside' the economy; it is not a claim on any income stream. In other words, a rising gold price does not necessarily mean that people have started fretting about inflation.

The market for options on inflation swaps confirms the ambivalence of current market signals: the price of options linked to inflation swaps shows that investors are paying up to protect against extreme scenarios at both ends of the spectrum.

Photo by Emma Frances Logan on Unsplash

OUR CENTRAL INFLATION SCENARIO

On its path to recovery from the Covid-19 shock, we see the global economy face various inflation head- and tail-winds (Figure 4, page 7) as it moves through different stages before settling into a 'new normal'.

2020: The immediate crisis aftermath – messy, as both supply and demand collapse.

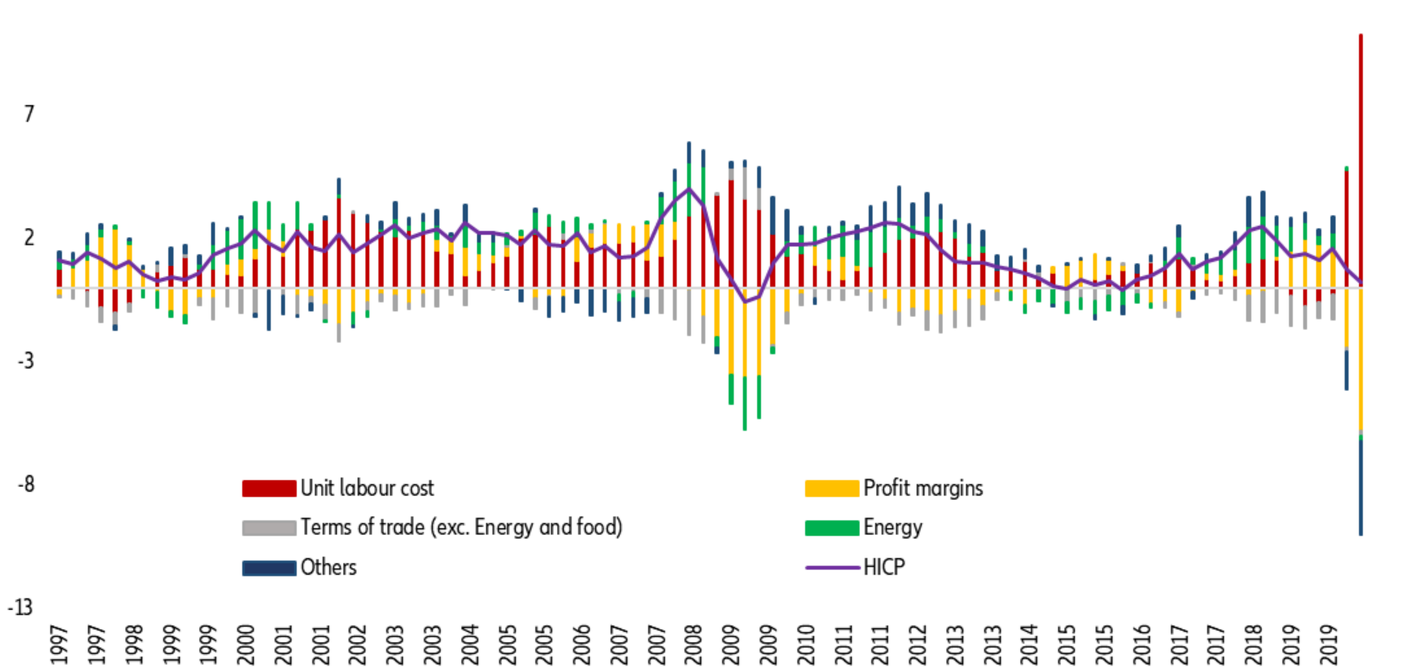
In the very short run, inflation is likely to remain muted, as a result of the sharp decline in economic activity, lower oil prices and limited monetary policy pass-through on the back of record-high precautionary savings amid heightened uncertainty.

Upside pressures on prices could come from income-support policies that prop up demand, and pockets of cost-push inflation from ongoing sanitary restrictions and reduced capacity. The recent strong rise in unit labor costs in H1 2020 is mainly due to the unprecedented fall in economic activity. However, their absorption could take longer, notably as (i) the labor market continues to be rigid in a few European economies despite recent reforms and (ii) companies' margins are at record low levels post the Covid-19 shock. Against weak domestic demand, at least a partial coverage could still be possible, given the planned tax reductions, which should support profits. However, the room to maneuver seems less important compared to past years. In addition, less favorable terms of trade and supply constraints could also support higher inflation, but the impact is likely to be limited.

Do mind the temporary factors distorting inflation figures (changed consumption patterns, disruption to price collection, VAT reduction, delayed summer sales etc.).

Bottom line: Despite the economy recording a sharp setback, inflation has proven surprisingly sticky. In 2020, we expect inflation to reach 0.3% and 1.1% in the Eurozone and the U.S., respectively.

Figure 2: Harmonized Index of Consumer Prices (HICP) - France Decomposition



Sources: IMF, ECB, INSEE; Allianz Research.

2021: Disinflationary recovery as supply recovers faster than demand.

While the economy continues its U-shaped recovery, demand headwinds loom in the form of lower household income and elevated unemployment as public support measures implemented in 2020 delayed job losses in some cases. Even though the supply side is recovering, the economy overall operates below capacity, despite a notable increase in insolvencies, which in turn weighs on firms' ability to claw back some margin.

Bottom line: Disinflationary pressures dominate as the recovery proves to be drawn out and gradual at best. In 2021, we expect inflation at 0.9% and 1.6% in the Eurozone and the U.S., respectively .

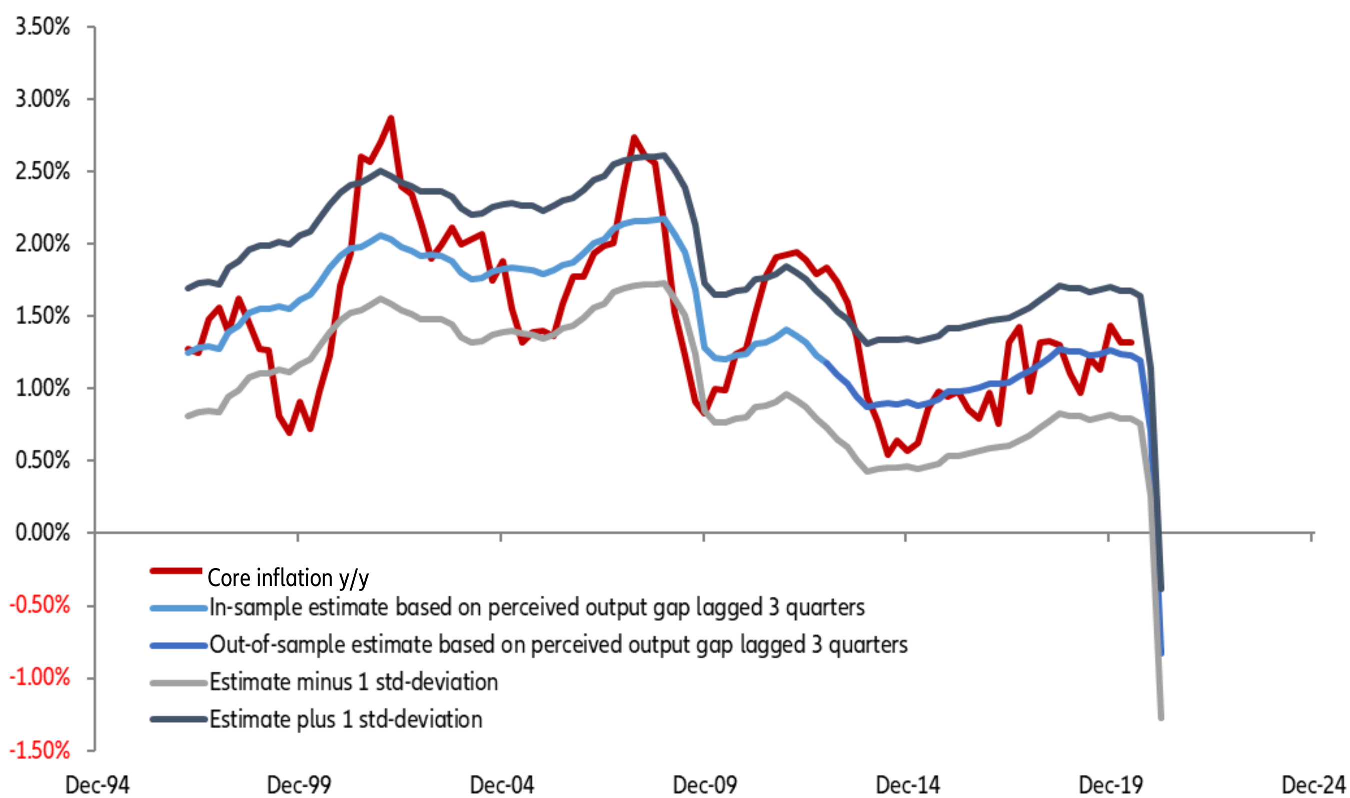
2022 and beyond: Demand exceeds supply, leading to temporary inflation overshoot.

This stage is achieved following the widespread availability and distribution of a vaccine across developed markets, putting an end to social distancing and allowing for a full recovery in private sector confidence.

Disinflationary forces fade as the global economy returns to pre-crisis levels in 2022-23 and there is a synchronized acceleration in global growth. Pent-up demand has faded, supported by the deployment of excess savings, while there is a full transmission of fiscal stimulus packages. Oil prices, meanwhile, accelerate moderately in line with the recovery.

Rising unit labor costs will be driven by higher wages on the back of growing social discontent and higher state interventionism and more regulation (in particular to advance the green transition: carbon tax, digital tax, border adjustment tax), coupled with productivity losses post Covid-19. Overall, we think these cost pressures should remain under control so as not to jeopardize the recent economic recovery. Some momentum around reshoring of production and 'pragmatic protectionism', in particular for 'nationally strategic' sectors such as healthcare and defense, and lingering protectionism could prop up inflation[3], but it is likely to remain in check, given the negative impact on economic growth.

Figure 3: Eurozone: Output gap and inflation



Sources: Refinitiv, Allianz Research.

Against this, central banks' switch to Average Inflation Targeting without the introduction of new tools is unlikely to produce much higher inflation rates. There could be some overshoot (to above 2% y/y in the U.S.), but for a limited period of time. Crucially, central banks' tolerance will depend on the key driver behind inflationary pressures[4].

A sustained shift to fiscal dominance, i.e. central banks prioritizing securing favorable refinancing rates for sovereigns over defending the inflation target, is unlikely. Confidence in central bank independence should thus remain intact. Massive crisis stimuli (monetary as well as fiscal) will be gradually drawn down in line with the recovery. Several long-term structural factors should also keep inflation at bay, e.g. aging and digitalization (robotization, automation).

Another potential headwind is corporate debt, which has increased a lot over the past years, since it could see businesses prioritize cost-cutting in the context of limited market power.

Bottom line: Inflation expectations in the absence of a drastic paradigm change with respect to the supply side and the interaction between monetary and fiscal policy are likely to remain in check. Our forecasts based on the output gap point to 1.2% in the Eurozone in 2022 and 2.1% in the U.S.

Figure 4: Inflation head- & tailwinds over time

Timing	Factor	Channel	Impact on inflation
Short to Medium-term (2020-21)	Social distancing measures	Supply	+
	Economic activity & private sector confidence shock (precautionary savings)	Mostly demand	-
	Negative output gaps	Demand	-
	Higher unemployment	Demand	-
	Insolvencies	Mostly supply	+
Medium to long-term (2022 & beyond)	Higher debt – sovereign & private	Demand	-
	Debt monetization / fiscal dominance	Demand	+
	Protectionism & reshoring skewed towards strategic sectors	Supply	+
	Price-wage-setting spiral triggered by social discontent	Mostly supply	+
	More interventionist state (green transition, regulatory factors)	Supply	+

3 A BIS report estimates that global inflation would have been about +1pp higher were it not for the supply-chain enabled efficiencies of global production.

4 A marked inflation overshoot :– while economic growth remains muted – would force central banks to decide whether to continue to backstop sovereign and corporate debt markets and ensure favorable financing conditions or defending the inflation target. If reshoring may lead to higher rates in the short-term, expect central banks to withdraw stimulus only gradually. If however inflation is driven up by a loss of confidence in central banks, the reaction is likely to be much more aggressive

ONLY A MARKED PARADIGM CHANGE IN ECONOMIC POLICY COULD TRIGGER A HIGH INFLATION SCENARIO

As laid out in our base case, the lingering presence of notable deflationary pressures, with GDP across many advanced economies not returning to pre-crisis levels before 2022/2023, suggests that central banks in the medium-term are unlikely to have to face the dilemma of choosing between defending their inflation targets and supporting the economy with an expansive monetary policy stance.

At most we expect a temporary overshoot in inflation, but the scenario of a more lasting and more forceful inflationary overshoot should not be ruled out altogether. In particular, there is a risk that the magnitude of the supply shock is underestimated. Similar to the mistakes made in the 1970s, supply-side issues including rising ULC (Unit labor cost) amid weak productivity growth and the extent of the economy's longer-lasting scarring, could be underestimated. Currently the supply shock is less visible in the context of subdued demand, but as the recovery advances and support measures are phased out, the extent of the permanent damage should become more apparent. For instance, structural unemployment and insolvencies could turn out higher than expected, which in turn would weigh on supply. In such a situation, aggressive fiscal and monetary stimulus aimed at pushing output back to the pre-pandemic level could well overshoot the mark. While a 1970s wage-price spiral would be difficult to imagine, given labor unions' loss of influence, a push for higher wages and more redistribution amid heightened social discontent, together with more state intervention in economic affairs and rising protectionist tendencies, could well exacerbate prevailing supply bottlenecks and lead to a notable and persistent acceleration in inflation.

In such as a scenario, we see a high risk of complacency by central banks, given their reluctance to engage in an abrupt and aggressive policy U-turn to rein in inflation, in particular due to three factors:

'Recency' bias: A structural break in the outlook for inflation may come unexpected, given the recent memory of the post-financial crisis period of a decade of below-target inflation despite large fiscal and monetary stimuli .

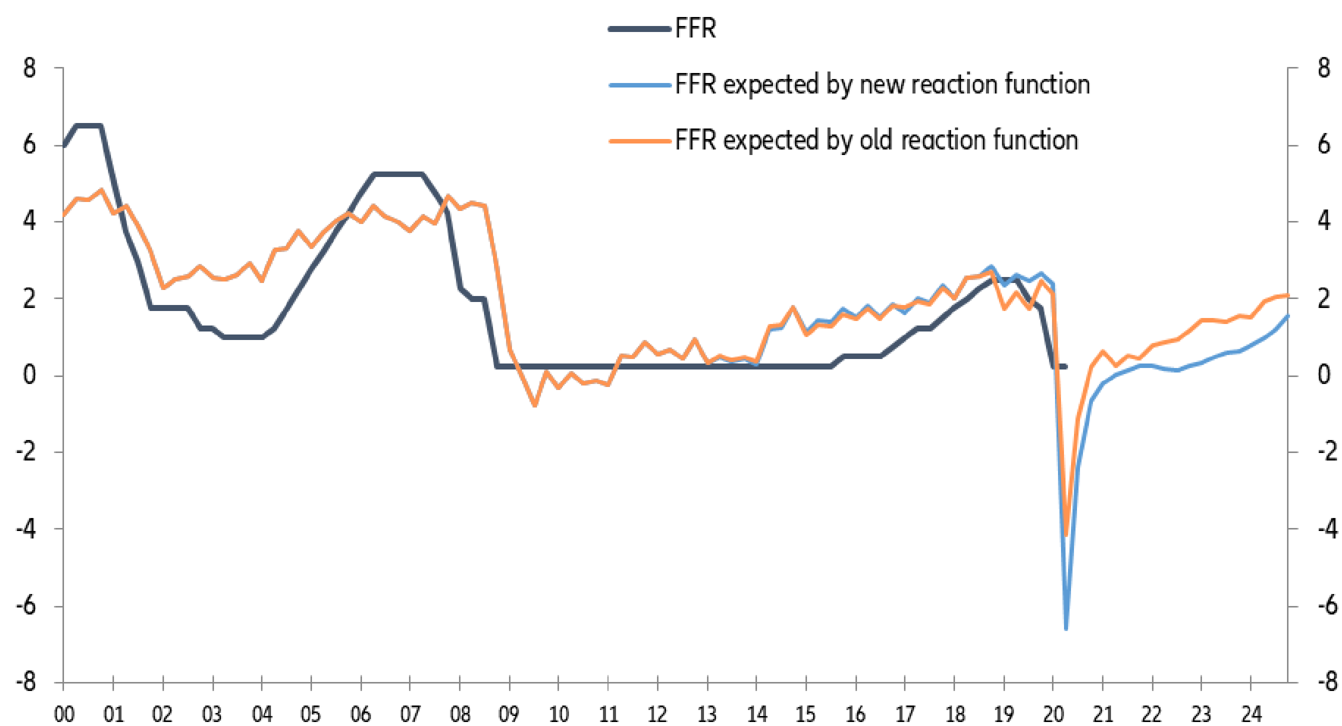
Strategy shift: In the U.S., the shift towards Average Inflation Targeting could allow the Fed to overshoot its target after periods of subdued price pressures. This more lenient approach towards inflation will likely make for a slower response to a build-up in inflationary pressures. Above-target inflation would be tolerated for a while so as not to jeopardize the nascent recovery. Only a core inflation rate that stubbornly registered above 2.5% and showed no sign of slowing down would eventually see central banks kick off the careful balancing act of taming inflationary pressures by gradually tightening monetary policy, while still extending as much support as possible to the real economy by keeping a lid on refinancing costs for companies and governments.

Who is afraid of the mother of all market tantrums? An aggressive policy U-turn in the context of expectations of rates being low for several years could well trigger a market meltdown. In fact, our new reaction function for the Fed [5] expects a first rate hike only by Q3 2023.

In this context the risk of monetary policy falling behind the curve calling for a more aggressive U-turn at a later stage is on the rise.

5 Our new Fed's reaction function takes into account new orientation in terms of average performance of inflation. For every quarter during which the 4-year average level of inflation undershoots 2%, we implement an incremental increase of the coefficient attached to the stabilization of the job market (NAIRU gap) and an incremental cut in the coefficient attached to the stabilization of inflation.

Figure 5: Reaction function of the Fed before and after average inflation target



Sources: Allianz Research., Euler Hermes.

HOW MUCH INFLATION ARE WE TALKING ABOUT?

In order to propose a long-term view on inflation in the Eurozone and the U.S., we build equations using variables allowing us to factor in long-term trends around:

- Unit labor costs, which currently have a higher probability to mirror more redistributive fiscal policies;
- Oil prices, which can be seen as the energy cost, the latter possibly exposed to upward pressures because of a rapid transition toward greener energy;
- The share of imports in the economy, in order to factor in any trend or proactive policy being favorable to reshoring;
- The monetization of debt, measured by the prevailing free-float (public debt detained in the banking system, including central banks and foreign central banks), which is currently on an upward trend across developed countries alongside unconventional stances of monetary policies;
- The output gap or growth deviation from trend in order to factor in long-lasting macroeconomic shocks.

The results of our estimates show conventional signs of all coefficients (Figure 6): an acceleration of unit labor costs triggers an acceleration of CPI inflation, with France having the highest sensitiveness compared with the U.S. and Germany. Any long-term policy of re-shoring is likely to generate higher inflation as well, the U.S. being the most sensitive in this case. We had the possibility to test the influence of debt monetization in the U.S. case only, which definitely exerts upward pressure on inflation over the long-term. We have identified here two regimes of inflation in function of the assumptions that we take on all variables of our models .

What is needed to switch to a high inflation regime with rates exceeding 4% on a persistent basis?

In our 'high inflation scenario' (Probability: 15%), the U.S. and European CPI inflation comes back to levels similar to those observed at the beginning of the 1990s: between 4% and 6% (Figures 7, 8). In the U.S., this situation would require unit wage costs to significantly accelerate close to 5.5% y/y over two years, a regime of growth typical of situations where full employment prevails, such as in 2000 or 1990. Debt monetization in this scenario of high inflation would reach more than 70% of the total U.S. debt outstanding against 60% today, while the share of imports as a percentage of GDP would decline to 10% against 12% in Q2 2020. This scenario would be equivalent to a full implementation of the most leftist aspects of the Democrats' program after winning elections.

In an even brisker scenario (inflation exceeding 6% on a persistent basis), the risk of an inflation-wage spiral in Europe and the U.S. would materialize, as strong social claims amid a context of high political tensions could lead to brisk changes in the structure of value-added sharing of Western economies. In terms of regimes of growth of unit labor costs, it would be equivalent to the experience of the end 1970s-early 1980s, when unit labor costs were increasing at a pace close to 10% y/y. Moreover, a rapid increase of energy costs driven by an accelerated transition (triggered perhaps by a major climate event) toward cleaner albeit more expansive forms of production could further shock the supply side. The weights of imports in the economy would evolve below 10% of GDP. It would correspond to a historical and strong process of reshoring. In this case, debt monetization could be as important as in our previous scenario.

Figure 6: Coefficients of inflation long-term equations

	Unit labor costs (%, y/y)	Imports (as % of GDP)	Oil price (%, y/y)	Currency (%, y/y)	GDP (deviation from trend)	Output Gap	Monetization of debt (% of total public debt)	Constant
US	0.57	-0.18	0.022			1.074	5.64	
France	0.8	-0.13	0.012		0.5			4.22
Germany	0.34	-0.06	0.005	-0.018	0.104			3.5

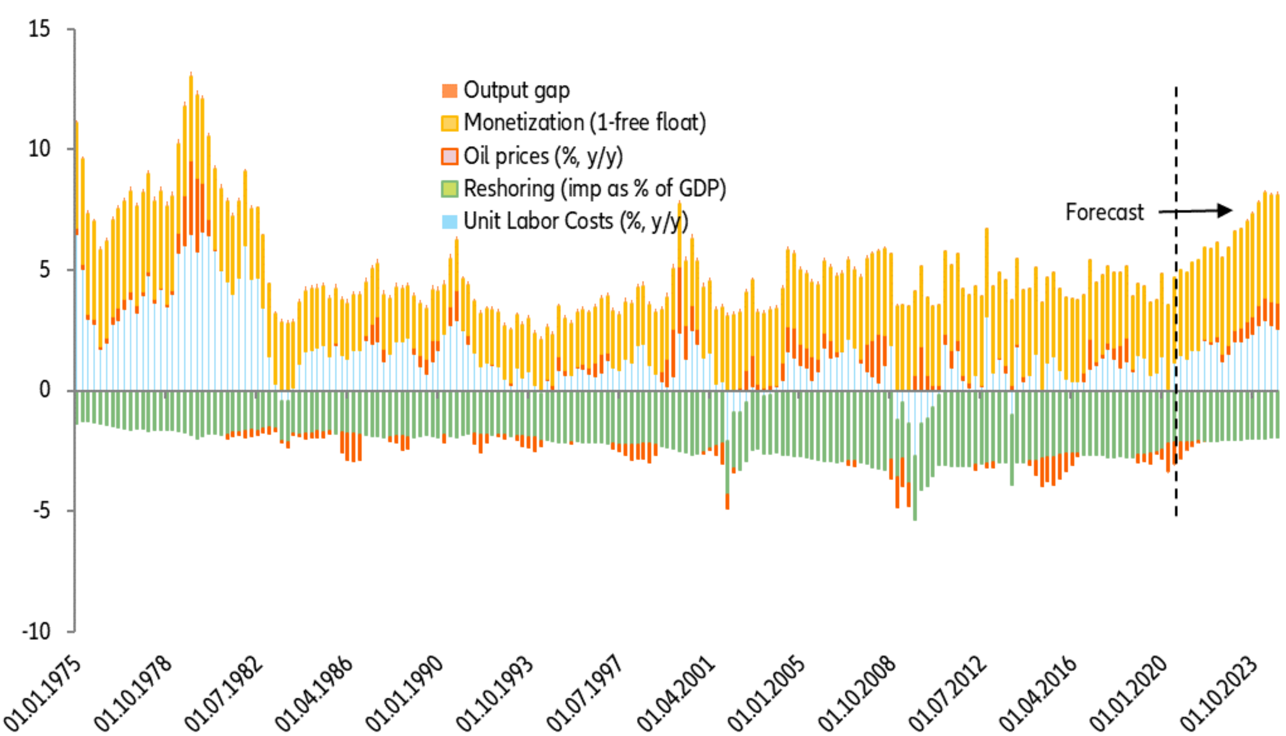
Sources: Allianz Research., Euler Hermes.

Figure 7: Long-term inflation forecasts

	2020		2021		2022		2023		2024	
	Base case	High	Base case	High	Base case	High	Base case	High	Base case	High
US	1.1	1.5	1.6	3.1	2.1	3.8	2.7	4.9	2.5	6.2
Euro Zone	0.3	0.5	0.9	1.8	1.2	2.6	1.4	3.1	1.6	4.5

Sources: Allianz Research., Euler Hermes.

Figure 8: Contribution to inflation in the U.S. (in %)



Sources: Allianz Research., Euler Hermes.

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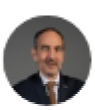
Sector Research



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