# Exiting low inflation traps by "consensus": nominal wages and price stability

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*"Attacks on the ECB's monetary policy are misguided. The energy would be better spent calling EU institutions, national governments, parliaments and social partners to fulfil their obligations."*

Jean-Claude Trichet, *Financial Times*, 13 October 2019

## 1. Introduction

Inflation in advanced economies (AEs) continues to be subdued, remaining below central banks' target in spite of aggressive and persistent monetary policy accommodation over a prolonged period (Graph 1). To escape the low inflation trap, we argue that, as suggested by Jean-Claude Trichet, governments and social partners put in place "consensus packages" that include a fiscal policy that supports demand and a series of ad hoc nominal wage increases over several years. These increases would be calibrated so that nominal unit labour costs increase at close to 2%, ie at the level necessary to sustain an inflation target near 2%, and be repeated until the economy is safely out of a low inflation trap. As we show in this paper, such "consensus packages" have played a central role when economies running at too high levels of inflation needed to exit high-inflation equilibria to transit to low-inflation ones. We propose to implement the same approach to exit the current low-inflation equilibria that characterise the euro area and Japan.

As of today, monetary policy has been more or less left to stabilise inflation on its own. Central banks have put in place an extremely accommodative stance for an extended period of time. As political economy conditions evolve, this role should be progressively substituted by rebalancing the macro policy mix with a more expansionary fiscal policy. More importantly, social partners and governments control an extremely powerful lever, ie the setting of wages at least in the public sector and potentially in the private sector, to re-anchor inflation expectations near 2%. As we show in this paper, such exceptional wage agreements have been a stepping stone for successful policy packages to disinflate

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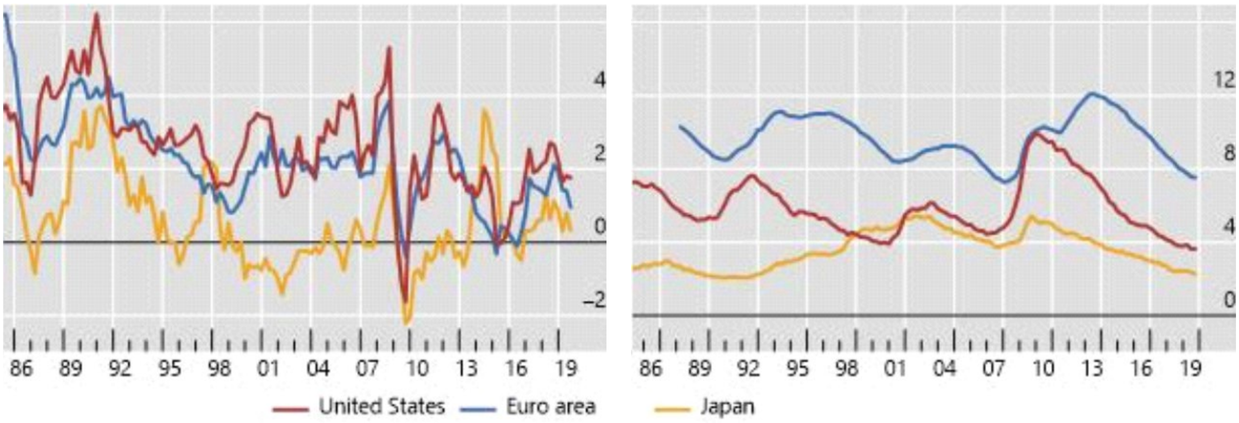
the economy. We argue that it is time to discuss such wage-setting agreements and their effectiveness to safeguard the nominal anchor of the economy.

Central banks should support such initiatives by social partners. This support is fully consistent with their price stability mandate. It is a natural extension of their role to anchor inflation expectations near 2%, by engaging with social partners more directly than usual due to special circumstances. Several stakeholders would have the right incentives to act for the success of the package and stick to the agreement: wage earners and trade unions, for obvious reasons; governments, for additional fiscal income; and savers, for the prospect of interest rate normalisation. Finally, in a full employment context, employers have an incentive to implement wage increases to keep their best performing employees and, given that nominal labour costs of all employers would increase in parallel, they would able to raise prices in line with the increase of their wage bills with limited risk of losing clients. Last but not least, central banks would cease to be "the only game in town". Moreover, this proposal, which relies on the well known mechanical transmission from wages to prices, is less uncertain than alternatives. It is also reversible, if need be. It seems preferable to more waiting-and-seeing – which might squeeze bank profits into the medium run – or to the "helicopter money" or modern monetary theory (MMT) that have been proposed recently.

Low inflation in spite of low interest rates and low unemployment

In per cent | Graph 1

Headline inflation | Unemployment rate




Sources: Global Financial Data; national data.

The low inflation trap may be due to special circumstances, ie supply shocks are predominant (Pereira et al (2019)). For example, supply factors might be affecting labour markets, muting wage demands by more than what might be suggested by the low headline unemployment numbers (Graph 1, right-hand panel). This may reflect in part that workers perceive that they have lost market power due to globalisation. In other words, simple specifications of the wage Phillips curve would appear flatter. But perhaps the trauma of the Great Financial Crisis (GFC) of 2007–09 is still depressing demand. Or perhaps the transmission mechanism is broken, most notably when operating around the lower bound on interest rates.

Lifting inflation closer to the actual central bank targets remains an important challenge for price and financial stability. Against the present difficulties, we revisit for inspiration some previous successful experiences, where economic policies changed the economy's nominal anchor. We look back into five episodes of disinflation from high and persistent levels of inflation. In all of them, there was a successful downward shift in the level of inflation: Israel (1985), France (1983), Italy (1984) and two more recent episodes, Spain (2010–12) and Finland (2016).[2]

We argue that activating similar policies "in reverse" would deliver higher inflation rates. This alternative is worth pursuing in view of the exceptional circumstances of very low interest rates and persistent undershooting of inflation targets in many AEs, after a decade of unconventional monetary policies (UMPs).

What can we learn from these successful disinflation episodes? They all consisted in simultaneously activating and coordinating several policies, over and above the changes in the money supply. In all these cases, inflation was brought down by a combination of fiscal austerity measures and special agreements to restrain wages and/or the degree of wage indexation, as well as, in some cases, price controls. We do appreciate the need for, and the complexity of, institutional arrangements to deliver the desired coordinated wage increase. It would require decentralised negotiations under weaker workers' bargaining power and labour contracts with flexible work arrangements and outright outsourcing (eg through Uber-like platforms). This institutional dimension has only started to be explored (Blanchard (2019), Ragot (2017)).

The alternatives are not attractive. Can we afford to wait until current policies might yield higher inflation? Or until a more balanced macroeconomic policy mix (with greater fiscal stimulus) materialises? We believe that these options pose increasing risks. More fiscal stimulus is unlikely where it is needed and where space is available. Another consideration is that the shortcomings of the current policies are reviving old and new more extreme proposals such as helicopter money or MMT. These are becoming more prominent in the public debate as a potential means of deepening UMPs. But such interventions are much less targeted and precise, and much more difficult to undo once unleashed. Our proposal, which is both controllable and easy to reverse, relies instead on a much better established transmission mechanism, that from wages to prices.[3]

Our proposal would obviate the danger that below-target inflation could morph into a de-anchoring of inflation expectations, as was seen in Japan from 1995 to 2013.

We will examine in turn (a) five cases of successful disinflation policy and (b) the lessons of these experiences for today before (c) explaining in more detail the new proposal and its implications for the role of independent central banks.

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2 With the exception of Israel (1985), we do not analyse other well known episodes of disinflation in emerging market economies (such as Argentina, Brazil or Mexico) that featured different programmes. We want to focus on the AE cases.

3 In this sense, our favouring a reliable and less uncertain transmission mechanism to stabilise inflation echoes the criteria put forth by Klaas Knot (2019): *"For policymakers the key challenge then is to assess which circumstances – or states – apply, before deciding on the most appropriate set of instruments to deploy. In the real world and in real time, policymakers will face uncertainties when making this assessment. The question on how to deal with these uncertainties should feature prominently in an upcoming evaluation of the ECB's monetary policy strategy. I will posit that policymakers should consider applying more caution in deploying unconventional instruments that are subject to more uncertainty, while acting more forcefully with conventional instruments where our knowledge is more developed."*

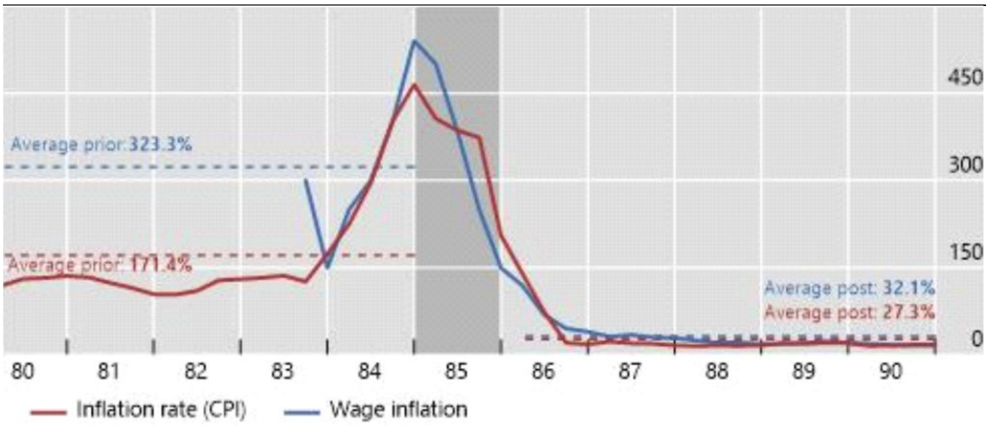
## 2. Five cases of successful disinflation "consensus packages"

### Israel, 1985

In "Crisis, stabilization and economic reforms: therapy by consensus", Michael Bruno (1992) describes the mix of ingredients that were mobilised in Israel to bring down inflation. From over 200% on average between 1981 and 1985, inflation came down to much lower levels in the following five years (Graph 2).

Israel's disinflation in 1985

In per cent Graph 2




The shaded region represents the year of the plan. The dotted lines are the four-year historical average before and after the year of the plan for each of the series, depending on data availability. Wage inflation definition may vary for each country.

Sources: Datastream; national data; BIS calculations.

Bruno argues that this success owes to a "heterodox approach", whereby several stakeholders take part in decisions that bring down inflation. This includes monetary policy, fiscal policy, and wage and price setting. Monetary policy sets higher interest rates and commits to peg the domestic exchange rate. Fiscal policy brings down the deficit. In the case of Israel, this fell from over 10% to 1% of GDP, essentially through the cutting of the defence budget and credit subsidies by as much as 4% of GDP each. This was key to re-establishing credibility on the fiscal front. Public finances were thus brought under control and, hence, there was no need to resort to runaway inflation to raise fiscal resources. In 1986, the government passed a law to prevent the financing of the government by the central bank, a concrete step towards monetary policy independence.[4]

Wage bargaining was also key. In July 1985, early on in the adoption of the programme, the conclusion of a wage agreement between the government and Histadrut, the main trade union, *"served as an important signal in establishing an initial nominal anchor for the system"*. Ex post, wage inflation came down by as much as inflation itself, from over 200% in the five years before the 1985 Stabilization Plan to about 30% on average in the five years that followed.

[4] There are several cases where coordination was tried but did not work (eg the Argentine Austral plan or the "konzertierte Aktion" in Germany). Therefore, a "consensus package" is not a silver bullet and can present implementation challenges.

Price controls were put in place. An inter-ministerial Price Committee ensured that selected nominal prices would be frozen at least in the early months of the programme. While perfect control is neither feasible nor desirable, Bruno argues that this brought reassurance to the price and wage setters. In addition, the exchange rate peg provided an additional anchor, by which wage setters could immediately see that excess wage increases would erode competitiveness to the detriment of employment. The Price Committee monitored the prices of 400 commodities and services to ensure they could not breach a given ceiling. Histadrut requested that the price controls on chosen commodities be extended beyond the initial agreed period of six to nine months. This helped persuade its members to agree to wage concessions. The proportion of commodities for which prices were controlled came down from 90% in July 1985 to 55% in April 1986 and 25% in January 1988.

Altogether, the main lesson that Bruno draws from the success of Israel in changing its nominal anchor is that it takes a systematic coordinated effort to *"eradicate the mental and institutional roots of the [very high inflation] crisis"*. In other words, the central bank cannot pull this off alone. The government needs to adjust its fiscal policy. Price and wage setters need to make concessions to break the pre-existing wage-price inflationary spiral.

This notion of *mental and institutional roots of inflation* strongly echoes the "low inflation mindset" that the Bank of Japan invokes to explain why Japanese inflation does not respond to slack in the labour market as it would in "orthodox" models of inflation (Kuroda (2018)). The argument runs that the mindset of Japanese households and firms has developed over several years of very low inflation and deflation. This would explain why the qualitative and quantitative (QQE) monetary policy adopted in 2013 succeeded only in lifting Japan out of deflation, but fell short of bringing inflation to its 2% target.

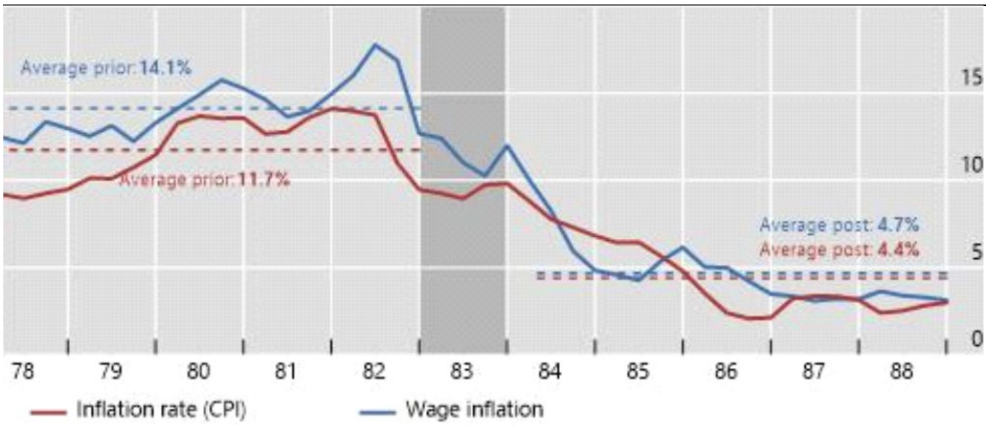
Interestingly, QQE has been accompanied by a sizeable fiscal stimulus. This experience casts some doubt on whether expanding the fiscal stimulus would necessarily raise inflation. Very low interest rates may suggest that the timing is now right for very ambitious infrastructure investment plans. But Japan's large deficits in recent decades, which are reflected in the high level of public debt, also show that they will not necessarily translate into higher inflation.

## France and Italy: disinflations of the early 1980s

Let us turn to other episodes of disinflation that also relied on an exchange rate peg to bring down domestic inflation: France, in 1983; and Italy, in 1984. As shown in Table 1, these are two cases of massive disinflation, from 11% to 4% in France (Graph 3) and from 17% to 6% in Italy (Graph 4). In these two cases, the monetary part of the disinflation was conducted within the straitjacket of the European Monetary System (EMS). The members of the EMS, which also included Germany, had agreed to peg their exchange rates. The anchor was the Deutsche mark and the Deutsche Bundesbank's monetary policy. With pegged exchange rates, inflation in France, Italy and other member states would have to converge to Germany's level of inflation, or these countries would rapidly lose competitiveness

The French disinflation in 1983: "le tournant de la rigueur" (austerity U-turn)

In per cent Graph 3

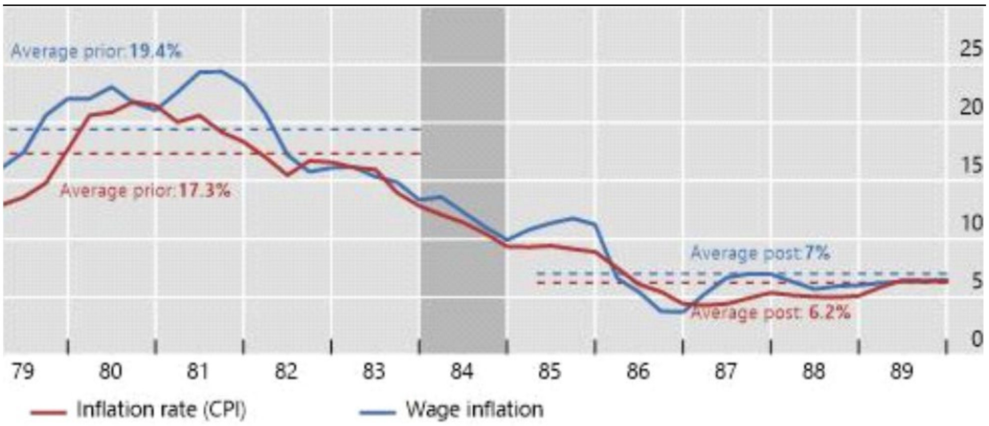



The shaded region represents the year of the plan. The dotted lines are the four-year historical average before and after the year of the plan for each of the series. Wage inflation definition may vary for each country.

Sources: Datastream; national data; BIS calculations.

The disinflation in Italy in 1984

In per cent Graph 4

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Sources: National data; BIS calculations.

However, what these two successful disinflations have in common with the Israeli case is that a combination of several ingredients contributed to the plan's success. Gressani et al (1988) stress that in the case of Italy: *"this complex process involved notable behaviors by private parties as well as government policies: the entrance in the EMS, a steady and restrictive monetary policy, the self-restraint of wage earners within the broader framework of a policy of 'precommitment' to target inflation rates announced by the government and the management of publicly regulated prices tied to this target."*

In 1981, the Bank of Italy abandoned the role of residual buyer of Treasury bills. The following years saw a gradual reform of the *"scala mobile"* indexation system of administratively set prices and of wages in several steps. Some of these involved the government's commitment to keep administrative prices in a range that would ensure that price inflation would be under a preset level. Trade unions conceded a partial disindexation of wages from inflation with preannounced target levels that would decline every year. For instance, the wage growth objective was reduced from 16% in 1982 to 9% in 1984 (Gressani et al (1988)). At the time, the administrative control of so many prices helped secure the credibility of the government when it preannounced, year after year, lower levels of inflation.

The French disinflation of the early 1980s originated in a U-turn by the socialist government elected in 1981. This followed an initial aggressive fiscal expansion to fulfil electoral programme promises, which led to unsustainable twin deficits, devaluations of the French franc and ongoing inflation. In 1982, the government put in place price and wage controls. In 1983, Economics and Finance Minister Jacques Delors led a series of measures to re-anchor France in the European Economic Community. This included a bargain with Germany that the Deutsche mark would be partially revalued and the French franc partially devalued. The government announced a package of special measures on 25 March 1983 (OECD (1983)). These included:

i. an administrative control on capital flows, limiting the amount of cash that French tourists could convert into foreign currency to less than FRF 2,000 per adult and FRF 1,000 per child;

ii. a forced subscription to state bonds by wealthier households;

iii. a cut in public expenditure by FRF 15 billion;

iv. a 1% increase in social contributions paid by households; and,

v. a FRF 7 billion reduction in the expenditures of public sector enterprises.

Altogether, taxes increased by as much as 2% of GDP. Turning to monetary policy, M2 growth was limited to 9% in 1983. In addition, trade unions agreed to reduce the automatic indexation of wages.

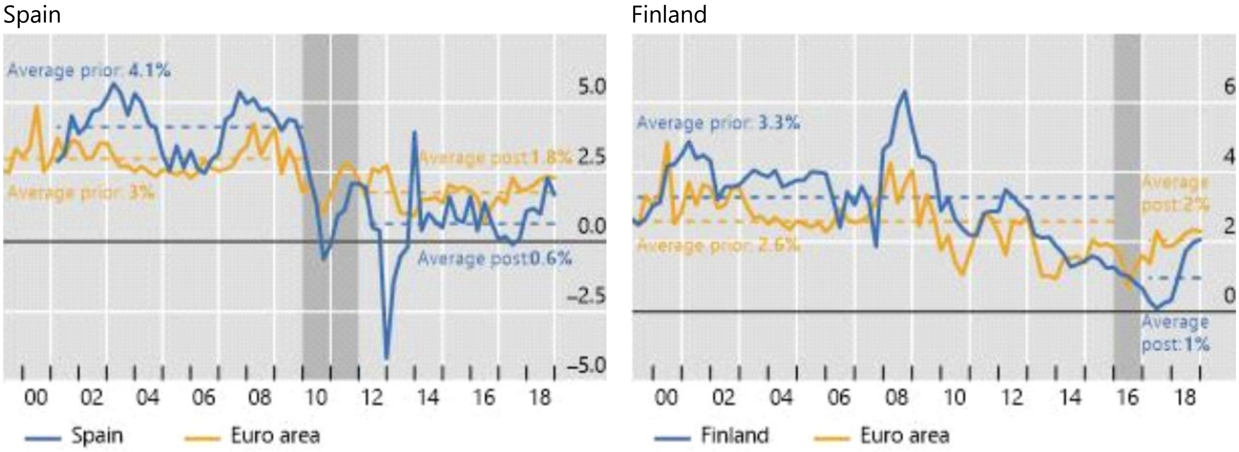
Cling and Meunier (1986) argue that the French disinflation was predominantly the result of a deliberate moderation in wage growth. Their empirical study of French inflation dynamics indeed finds that the residual of the wage equation is significantly more negative in 1984 than that shown by the price equations. Wages increased by much less than their determinants in terms of productivity, price inflation and level of slack would predict. This step down in wage inflation is also striking in Graph 3. The decline in wages was larger, and wage inflation fell to 5% before price inflation did.

## More recent disinflation policies

These three episodes of successful disinflation have much in common. Yet they may be deemed irrelevant in the more recent context, where inflation is much lower. For this reason, we shift our focus to the disinflation conducted in Spain in 2010–12 and Finland in 2016. Spanish inflation declined from 3.3 % on average in 2007–11 to 1.7 % between 2012 and 2017. Inflation in Finland fell from 2.3% in the five years before the country's 2016 reforms to 1.4% since. While much more modest in absolute magnitude, as shown in Graph 5, these policy packages allowed Spanish and Finnish wage inflation to be brought down from above the euro area average before the reforms to below this average thereafter.

Disinflations without monetary policy: Spain in 2012 and Finland in 2016

In per cent Graph 5




The shaded region represents the year of the plan. The dotted lines are the historical average before and after the year of the plan for each of the series, depending on data availability. Wage inflation definition may vary for each country.

Sources: Datastream; national data; BIS calculations.

What is particularly interesting in these two cases is that they both took place in euro area member states (the countries account for about 12% and 2% of the euro area economy, respectively), where monetary policy is set for the area as a whole. Neither Spain nor Finland could deploy monetary policy to lower the inflation rate. The two countries undertook these reforms in very different contexts. Spain had come under pressure from the European sovereign crisis. The spread on Spanish sovereign debt overtook that of its Italian counterpart in 2012. Finland, in contrast, has remained one of the four AAA-rated sovereigns of the euro area (the others being Austria, Germany and the Netherlands). Finally, the two cases involve countries where, unlike those of France, Israel and Italy in the 1980s, the central banks are legally independent. We can therefore assess how the Bank of Spain and the Bank of Finland positioned themselves in the national debate over decisions of disinflationary policies decided and coordinated by the government.

## Spain, 2010–12

Spain combined fiscal austerity and two labour market reforms in 2010 and 2012 and wage restraints throughout. In 2010, public sector nominal wages were cut by 5% and the VAT rate was increased from 16% to 18%. In 2012, wages in the public sector were to be frozen till 2015 and the VAT rate was further increased, from 18% to 21%. The wage cuts in the public sector spilled over to wage moderation in the private sector. Nominal wage growth decelerated from 4.3% in the five years before austerity to 2% thereafter. Real unit labour costs dropped from 0.3% to –2.1%. And both wage and price inflation declined (Graph 6).

Of course, part of the disinflation is likely to have reflected the surge in unemployment, which increased from 12% before the crisis to 27% in 2012. Still, it should be stressed that unemployment need not have had an impact on wages. First, in the public sector, given that civil servants cannot be fired. Second, because such a high surge in unemployment itself reflects downward wage rigidities.

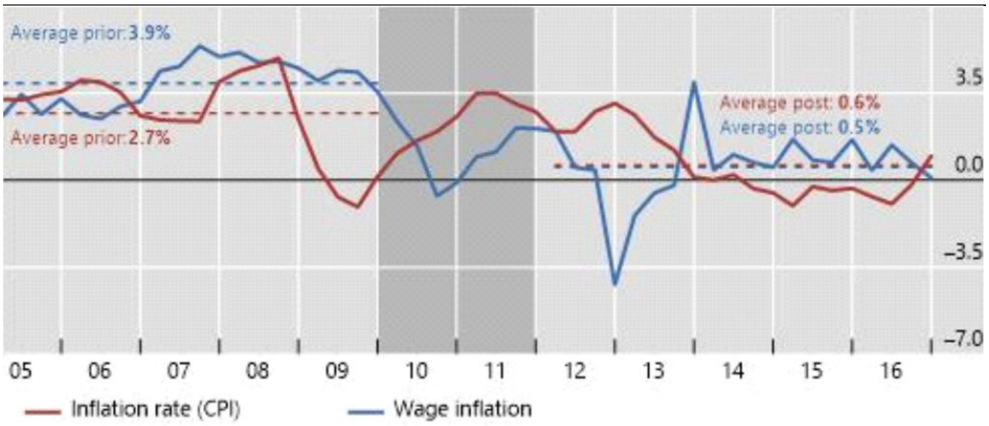
The Bank of Spain strongly supported the fiscal austerity and the labour market reforms. First, it applied its own staff wage cuts, aligned with those implemented in the public sector. Wages of Bank of Spain staff were cut by 5% in 2010, and a freeze from 2012 to 2015 was also implemented.

In addition, the central bank supported the plan in speeches and in its 2013 annual report. In its foreword to the report, Governor Linde stated:

*"Notwithstanding, the Spanish economy could not have entered a phase of recovery had it not progressed, as it has done, in the correction of imbalances and in the design and implementation of the reform programme. The year 2013 saw significant advances in fiscal consolidation, in gains in competitiveness and in the restructuring of the banking system. The result has been the normalisation of the external funding flows the Spanish economy needs for sustained growth."*

Spain's disinflation in 2010–12

In per cent Graph 6




The shaded region represents the year of the plan. The dotted lines are the four-year historical average before and after the year of the plan for each of the series. Wage inflation definition may vary for each country.

Sources: National data; BIS calculations.

As an independent institution, it did not need support the plan. Yet it did so, vigorously.

## Finland, 2016

The competitive pact put in place in Finland shared many similar ingredients. The pact was a tripartite agreement between the government, trade unions and employer unions signed in June 2016. The plan included an increase in employees' working time by 24 hours per annum without any increase in pay; a cut in public sector employee bonuses of 30% between 2017 and 2019; a shift of social security contributions from employers to employees of nearly 4% over four years; and the freezing of all wages in 2017.

The OECD considers that the pact has reduced unit labour costs by 4% from 2017 onwards. The effects on inflation are sizeable, as seen in Graph 7.

As in the case of Spain, the Bank of Finland, in spite of its independence, supported the pact. Also as in Spain, the central bank implemented the same pay cuts for its staff as were imposed elsewhere in the public sector. Governor Liikanen supported the aims of this pact in several speeches. For instance, on 7 May 2015, he stated:

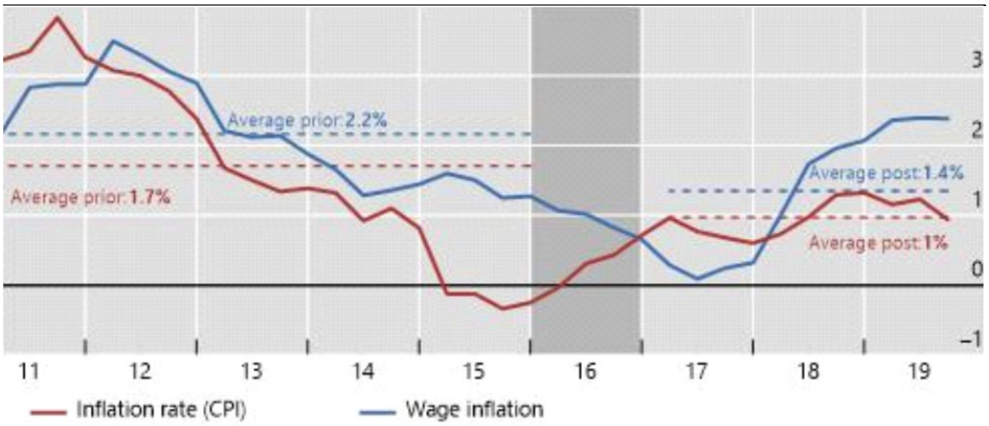
*"We have three major tasks.*

1. *We need to restore cost competitiveness of our economy. This is the pre-condition to create growth and jobs.*
2. *We need to make structural reforms to promote growth and improve possibilities to create jobs. Here the new government needs to move fast with decisions and their implementation.*

3. *We need to consolidate our public finances. We cannot move a growing debt burden to our children and grand-children.*

Finland's 2016 competitiveness pact

In per cent Graph 7




The shaded region represents the year of the plan. The dotted lines are the four-year historical average before and after the year of the plan for each of the series. Wage inflation definition may vary for each country.

Sources: National data; BIS calculations.

"*Here we need a strong government and functioning relations between social partners.*"

The Bank of Finland had repeatedly pointed to the necessity of such a pact to improve the competitiveness of the Finnish economy. For instance, in the editorial of its *Economic Bulletin* of December 2015, the Bank stated:

*"Resolving the protracted problems in the Finnish economy requires action in three areas. It is necessary to improve cost-competitiveness, it is necessary to improve cost-competitiveness, continue structural reforms and continue structural reforms and end growth in the public debt."*

## 3. Lessons for today: policy design to avoid falling into the "low inflation" mindset

The five successful policy cases described above share a process of grand national bargaining, in which a national consensus[5] was reached between various economic agents to break away from a high-inflation equilibrium. In short, the common ingredients included a trigger, a macroeconomic policy component and a proper sequencing and/or process for implementation. The trigger was (i) the announcement of coordinated wage (and price) controls that allow (ii) the removal of previous contractual arrangements that compound a mindset of high inflation and favour backward-looking indexation. The accompanying macroeconomic policy was (iii) the reduction of fiscal deficits to reduce the pressure from aggregate demand. There could be other supporting macroeconomic policies but, at a minimum, fiscal austerity was paramount. Finally, these disinflationary cases required all agents to play

[5] Arguably, the term "consensus" may not be appropriate in the case of Spain. There, wage adjustments came under the intense pressure exerted by investors on the government to put in place a fiscal austerity policy package. We know from frequent episodes of fiscal adjustments that many structural reforms are not "accepted" by many groups in society, especially when there is uncertainty about winners and losers in both the short and the medium-to-long term.

a cooperative game. It was supported by the central bank, (iv) whose involvement and explicit support as an independent technical "broker" reinforced the credibility of the programme. Central bank support was typically strong and publicly voiced. Independence from the government and from the influence of other agents, and the consistency of the policy package with the objective of price stability, were key.

## Rebalancing the policy mix with fiscal policy

Let us start with the more obvious component of the lessons learned, the accompanying macroeconomic policy. The countercyclical policy space during the GFC was activated without an explicit incomes or wages policy. First, fiscal policy was intensively used in the aftermath of the Lehman failure in 2008–09. But when debt-to-GDP ratios rose to around 80–100%, governments became more risk-averse under market pressure, especially in the euro zone after the sovereign debt crisis. Subsequently, monetary policy (including UMP, as mentioned above) became the predominant instrument for stimulating the economy in AEs, to the point where it was seen as "the only game in town". The accommodative monetary policy stance in AEs played a major role in the recovery. Indeed, central bank asset purchase programmes have proven successful in averting deflation and bringing down long-term rates (see eg CGFS (2019), Lhuissier et al (2019) and references therein).

However, with the benefit of hindsight and now after a decade of implementing UMP, these actions are increasingly producing diminishing marginal returns. Many voices now caution against any additional reduction of policy rates further into negative territory. Indeed, even if long-term interest rates were further reduced, it is an open question whether private agents (commercial banks, households and firms) would respond in a significant way to such a stimulus, by increasing credit supply, consumption and investment. In addition, using UMP for a prolonged period of time might also exacerbate the risks for financial stability without necessarily adding much to stimulus. Finally, asset purchases are also criticised on the grounds that they work by increasing the market value of the financial wealth[6] held mainly by households in the top decile of the income distribution.

Therefore, rebalancing the policy mix towards more fiscal stimulus is now recognised as a better way of continuing the stimulus while avoiding the overburdening of monetary policy. Indeed, support for using more fiscal policy is growing (Blanchard (2019)), as it is for a rebalancing of policy instruments (Carstens (2019), BIS (2019), Pereira et al (2019)). When fiscal space is measured by the cost of servicing debt (R) minus output growth (G) rate, or (R – G), to assess the sustainability of debt-to-GDP, we find that there is room in many euro zone countries to implement such policies.

In fact, looking at many AEs over the last 25 years, we see that there is a secular downward trend in government funding costs relative to nominal growth. Graph 8 shows that the difference between government effective funding costs and nominal growth became negative for the median AE around 2013 (left-hand panel) and has since then gone deeper and deeper into negative territory. And, according to the most recent data available (2018), almost all AEs now pay an effective interest cost of debt that is below their nominal GDP growth rate.

Going forward, the key question for policymakers is how to manage these favourable conditions to foster debt management in order to lower the cost of public debt, using the opportunity

6 While asset purchase programmes have indeed increased asset prices, it is widely agreed that they contributed to reducing income inequality by stimulating job creation. In the United States, 20 million jobs have been created since the beginning of quantitative easing in 2008. In the euro area, 11 million jobs have been created since 2013 after the ECB deployed several non-conventional monetary policy measures, including outright monetary transactions in September 2012 and asset purchases from March 2015.

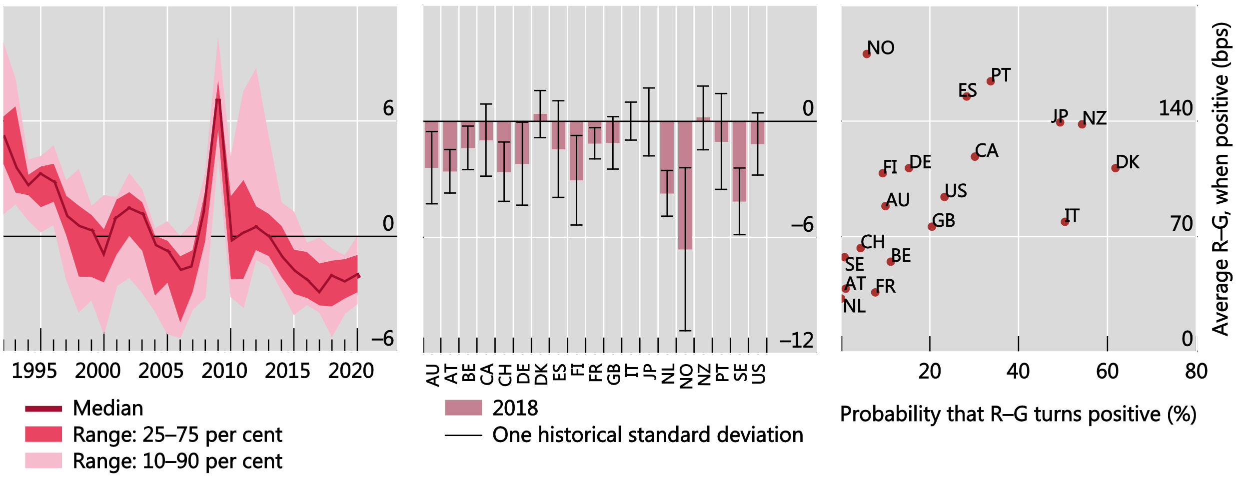
to lock in low interest rates to finance infrastructure and growth-enhancing spending in areas such as education and the transition to renewable energies.

Naturally, cheap debt today could become difficult to refinance tomorrow. But historical statistical exercises show that the vast majority of AEs are unlikely to face a situation where government funding costs would actually increase up to the point where they would exceed nominal growth.[7] Policymakers in some AEs therefore have space to adopt more countercyclical fiscal policies and take more action to buffer any weakening of economic activity in the short run, but in most cases they are facing political economy challenges even when some fiscal space is available.

### Government interest burden has fallen below nominal growth, and snapback risk appears limited

In percentage points | Graph 8

Cross country distribution of R – G | R – G by country | Likelihood and severity of an adverse scenario




Using current government yields. AU = Australia; AT = Austria; BE = Belgium; CA = Canada; CH = Switzerland; DE = Germany; DK = Denmark; ES = Spain; FI = Finland; FR = France; GB = United Kingdom; IT = Italy; JP = Japan; NL = Netherlands; NO = Norway; NZ = New Zealand; PT = Portugal; SE = Sweden; US = United States.

Sources: OECD, *Economic Outlook*; BIS calculations.

Fiscal policy was somehow working mostly through automatic stabilisers during the GFC. It has been reactivated, in the United States after the election of President Trump. And indeed, inflation is actually higher in the United States than in the euro area. On the other hand, in addition to the impediments coming from the political economy, the fiscal expansion of Prime Minister Abe's Three Arrows plan in Japan in 2013 shows that even combining expansionary fiscal and monetary policies may not be enough to lift inflation.

7 This is confirmed in the right-hand panel of Graph 8. In most countries, either the likelihood that that interest cost would exceed nominal growth is limited, or the size of the interest-growth differential in the case where it turns positive is small, or both. These simulations suggest that, except for countries such as Denmark, Italy, Japan and New Zealand, the likelihood of an adverse scenario is limited, typically below 35%. In addition, an adverse scenario could potentially be more benign than usually foreseen, as government interest costs would exceed nominal growth by only 1 percentage point or less for most countries.

Therefore, there is a case for rebalancing macroeconomic policies using more fiscal space (even with the caveats above) but, until the adequate political economy conditions allow such a rebalancing from monetary to fiscal stimulation, the accompanying accommodative macroeconomic policy would remain essentially monetary. Would that suffice? The increasing risk that we are observing is that the decreasing returns of the current policy stance might incentivise the recourse to even more radical versions of unconventional monetary policy. We examine that risk next.

## New proposals are becoming more radical: MMT and helicopter money

In view of the persistence of subdued inflation, the risk that "too low for too long" inflation will become entrenched in the mindset of economic actors is looming in countries other than just Japan. Given the likely side effects of keeping low interest rates for too long on financial stability, and the chances that these effects will have diminishing returns, some old and new proposals to lift inflation have emerged.

That is the case, for example, with modern monetary theory. MMT sees currency as a public monopoly for any government, irrespective of issues of credibility and confidence. Following that reasoning, the sovereign could use money creation to achieve full employment through a straightforward financing of economic activity. The obvious risk of inflation can be addressed subsequently by raising taxes and issuing bonds to remove excess liquidity from the system. The major underlying assumption is that of "seignorage without limits". A government that issues its own money cannot be forced to default on debt denominated in its own currency. As commentators have pointed out (Summers (2019), Krugman (since 2011, but more recently 2019)), MMT poses significant problems. It would undermine the complex set of institutional and contractual arrangements that have maintained price and financial stability in our societies. Moreover, numerous experiments in the history of hyperinflation in AEs and mostly in developing countries show that, while outright default in a country's own central bank currency might be avoided, the value of domestic assets including money could be reduced to almost zero.

The concept of helicopter money goes all the way back to Friedman (1969), and was seen as a solution to deflation in Japan (Bernanke (2002)). It is now sometimes suggested as an alternative to asset purchase programmes and quantitative easing to address the lack of economic response in a liquidity trap (after interest rates have reached the zero lower bound (ZLB) and when there is still a recession). In that case, central banks could make monetary payments directly to individuals, or the policy could also include the direct and permanent monetisation of budget deficits. Helicopter money has been suggested in the same context of depressions, but its implementation has been limited and with mixed success.

More recently, Bartsch et al (2019) have argued for an unprecedented response, recognising that monetary policy has reached its limits and that fiscal policy alone is not enough. They call for a "going direct" approach, advocating ways for the central bank to get money directly into the hands of public and private sector spenders. They list scenarios for an extreme form of "going direct", such as an explicit and permanent monetary financing of a fiscal expansion, ie helicopter money. But they also discuss coordinated approaches where there is *"an explicit inflation objective that fiscal and monetary authorities are jointly held accountable for achieving"*. Such an approach would require some *"form of a standing emergency fiscal facility"*, to be *"only activated when monetary policy is tapped out and inflation is expected to systematically undershoot its target over the policy horizon"*.

The major common risk of such extreme cases of unconventional monetary policy is that their impact on inflation is not precise enough to reach central banks' targets at the desired objective of, say, 2%. That is due essentially to the transmission of such large-scale experiments through aggregate demand in ways that, once unleashed, would be difficult to control or reverse if need be.

Therefore, the time is ripe to envisage alternative transmission channels that would avoid falling further into a "low-inflation mindset" or playing the "sorcerer's apprentice". There needs to be an alternative to lifting asset prices, or using extreme cases of unconventional monetary policy such as MMT or helicopter money. Drawing on the lessons from the successful disinflation episodes, we have discussed above the accompanying expansionary macroeconomic policy. We now discuss the trigger for moving to a new nominal anchor.

## 4. Beyond fiscal policy, the wage increases component of a reflation "consensus package"

An alternative direct approach, which we consider much more effective in how it eventually impacts inflation in order to reach the desired level of inflation, is targeted nominal wage increases. This approach has been successful in disinflationary episodes in the recent and less recent past, as explained above. A side benefit of this approach is that it would balance the communication of the central bank towards wage and price setters away from financial markets. It would avoid additional lower interest rates for longer, MMT or helicopter money.

### Why have wages remained moderate throughout the recovery?

Before detailing this alternative approach, it is worth recalling that the post-GFC recovery in employment and wages has not led to higher inflation. Among many factors (Pereira et al (2019)), two might be key in explaining the modest wage increases observed – for example, in the euro zone.

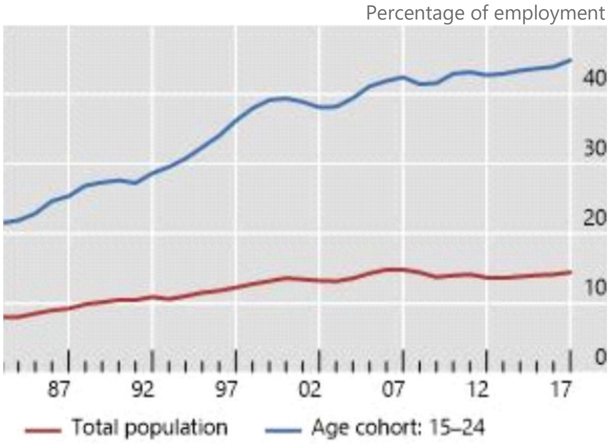
Many AEs, especially in the euro zone, have an ageing workforce, with a large increase in the participation of older workers. These older workers may care more about accumulating and securing pension rights by keeping their job than asking for higher wages. There is evidence that the labour supply from older workers is more elastic (Bank of Japan (2018)), that the higher participation of workers over the age of 55 depresses OECD wage inflation (Mojon and Ragot (2018)) and that older workers are less likely to switch jobs (when wages adjust; see Pereira et al (2019)).

In addition, the bargaining power of workers has declined, a trend observed across all OECD countries, and the number of precarious temporary jobs has significantly increased, with more short-term, less stable work contracts, especially among younger workers. In essence, these features compound the overall uncertainty over permanent income and the future. They also incentivise more prudent consumption behaviour and less active wage bargaining attitudes (Graph 9).

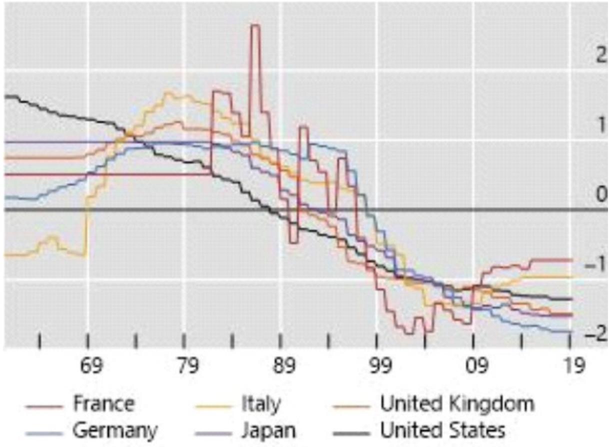
Another important question is to understand the pass-through of current wage increases into price inflation – for example, in the euro zone. In theory, oligopolistic firms would always tend to preserve profits and increase markups, even during a crisis with weak demand and when labour costs are being cut. However, procyclical markups can also be observed under stickiness of labour costs (wages) and, in those cases, margins can be cut in order to survive severe crises where firms can cut prices. In addition, pricing settings under "customer markets" pricing theory – where firms try to preserve customer loyalty – can explain the lower or limited pass-through of increases in labour costs during the current phase of the recovery. Some studies investigate these issues for the United States, where the GFC also brought on a credit crunch (Gilchrist et al (2016)), and for firm price adjustment in Europe (Fabiani et al (2015)), but they do not cover the more recent period of relative recovery.

Temporary employment and workers' bargaining power Graph 9

Euro area temporal employment




Workers' bargaining power[1]




[1] A measure of pricing power is constructed by applying the method of principal components to changes in four indicators of relevant labour market conditions: collective bargaining coverage, employment protection, union coverage and union density.

Sources: OECD; BIS calculations.

The virtue of a coordinated wage increases throughout the economy is precisely that it facilitates the passthrough to higher prices from the viewpoint of the firm. Indeed, wage setting are typically bargained at the sector level. This is to avoid that single firms can free ride to compete others out by not implementing the sectoral wage standards. This reinforcing mechanism would be stronger in a tight labour market. Firms who would not increase wages would risk loosing their best performing workers.

In addition, the public knowledge that not only your wage bill but also the ones of competitors in your branch of activity have increased reassure the firms that increasing prices would not reduce your market share.

To examine the data, we look in Graph 10 at the level of wage increases minus productivity gains since 2010, ie the unit labour cost. Over the long run, achieving a 2% inflation is consistent with a 2% annual increase in the nominal unit labour cost, which is represented by the straight line in the graph. Over the last 10 years, the wage gap to a level that would have been consistent with 2% inflation amounts to almost 10% in the euro area and 20% in Japan. Interestingly, looking at the post-2013 period, the gap is somewhat less dramatic, which shows the relative success of Japanese macroeconomic policies under the aforementioned Three Arrows approach of the Abe administration. But even focusing on this more recent period, Japanese wages are 7% short. Turning to the euro area, annual wage inflation has been about 1% too low on average since the 2013 recession. While wages and nominal labour costs have accelerated somewhat since 2018, nothing guarantees that this recent faster pace will be sustained.

In a nutshell, targeting nominal unit labour cost would, at the current juncture, provide an effective guidepost to lift inflation expectations at a level consistent with the 2% inflation objective of central banks.

Nominal unit labour cost in total economy

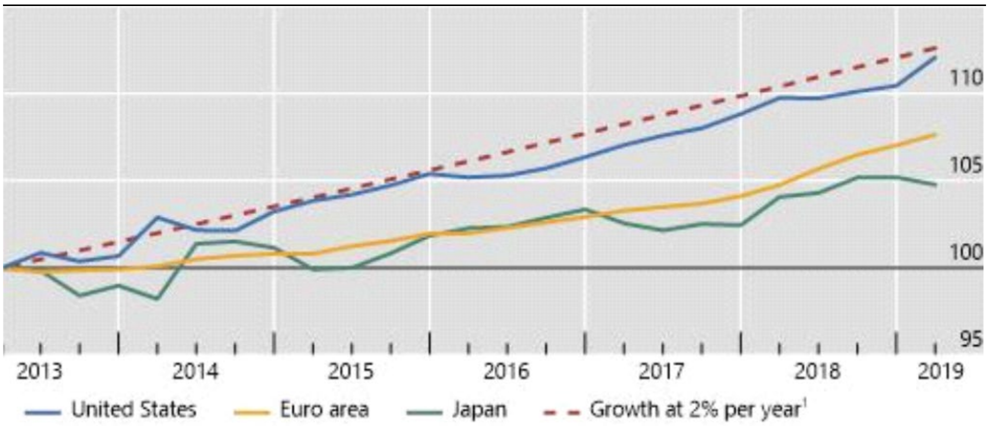
Q1 2010 = 100 Graph 10a


[1] Line rebased at 100 on Q1 2010 and assuming a constant growth rate of 2% per year.

Sources: OECD; BIS calculations.

Nominal unit labour cost in total economy

Q1 2013 = 100 Graph 10b




[1] Line rebased at 100 on Q1 2013 and assuming a constant growth rate of 2% per year.

Sources: OECD; BIS calculations.

### The new proposal: coordinating and planning increases in nominal wages

In practice, we propose a "grand bargain" of social partners to achieve a coordinated nominal wage hike. The size of the annual increase could be 2% plus the rate of increase of productivity. An increase of 2% is consistent with the nominal inflation target in most advanced economies. Productivity gains, however, are disinflationary if they are not matched in real wages. Ad hoc increases of nominal wages at a rate to 2% plus the growth rate of productivity would be repeated until realised inflation is safely stabilised near 2%.

The process for achieving this social contract could be either a grand national or, in the case of the euro area, a euro area-wide bargaining with trade unions, employer associations and governments.[8] If social partners are too weak to influence wages in the private sector, government can lead the way as an employer. In addition, similarly to the approaches followed in the 1980s, governments can also lift administrative prices in line with a near 2% inflation target. Such announcement by governments on administrative prices would signal the commitment to deliver inflation in line with the inflation target of the central bank (Bruno (1993)).

That effect could then be replicated by the private sector. It could also be extended to new contracts by other coalitions among social partners. It might be necessary to have an implementation period of some two to three years in a row, with repeated scheduled and predictable hikes for this measure to reignite a wage price spiral consistent with the desired nominal anchor. The scheme could be extended for additional years, unless other supportive policies to boost aggregate demand (eg the rebalancing of supportive macroeconomic policies discussed above using more fiscal expansion) themselves start to support inflation.

It is highly likely that higher nominal wages would lift inflation and spur inflation expectations (Bénassy (2007), Walsh (1998), Woodford (2011)). Moreover, the nature of a well publicised and well organised grand bargain would help to reduce uncertainty, which should also trigger changes in behaviour for consumption and savings, with a positive impact on inflation.

In a recent paper, Bobeica et al (2019) show that labour costs drive price inflation in the euro area. This channel is effective across sectors and countries of the euro area.[9] Such mechanisms are central in the supply blocks of macroeconomic models, including the ones used by central banks (eg the Federal Reserve). In such models, which are estimated on historical data, wage inflation translates mechanically into higher inflation through a cost channel. Indirectly, higher wages may foster aggregate demand

It should be noted that such a proposal would ultimately have no effect on real wages (if the 2% inflation target was achieved) and that the effect on fiscal deficits would be limited or offset by increases in nominal fiscal income. Finally, by lifting nominal incomes, this reflationary "consensus package" would reduce debt-to-GDP ratios of the sovereign and the private sector alike, henceforth facilitating the deleveraging of the economy.

This alternative approach should be similar in its working to that of the disinflation policies described above: it uses a "consensus" approach to re-inflate and re-anchor expectations. Needless to say, the proposal should also trigger collateral effects that should be positive for political economy cycles.

As was the case in the five successful disinflation episodes reviewed above, we may currently be in a situation where the central bank cannot succeed alone. Mario Draghi has recently explained that the central bank will manage eventually, but that other policies (possibly essentially fiscal policy) could accelerate the stabilisation of inflation (Draghi (2019)). In July 2014, Jens Weidmann showed the way by stating, in an interview (Weidmann (2014)), that the return of stronger wage increases would be welcome in Germany – especially in view of the tensions within German labour markets.

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8 See the proposals by Ragot (2017) and Blanchard (2018) for a discussion on the form of the institutional incarnations of these decisions.

9 They use country and sector quarterly data over the period Q1 1985–Q1 2018 and identify a strong link between labour cost and price inflation in the four major economies of the euro area and across the three main sectors. However, their results show that it is more likely that labour costs are passed on to price inflation through demand shocks rather than through supply shocks.

### The transmission mechanism of our proposal: cost-push and re-anchoring expectations

The important point is to ascertain the strength of the labour cost channel for the dynamics of inflation under current circumstances. In any event, it is necessary under the current characteristics to take into account the more decentralised and atomised representation structures of labour (eg trade unions are currently stronger in Europe and in Japan than in the United States). This does not imply that we are advocating the restoration of strong bargaining powers for trade unions (Graph 9) or that we have any particular view on how business-labour relations should evolve in the current world. The point made here is simply that the trigger for a re-anchoring of inflation would progress through the same mechanisms that were successful in disinflation episodes: wage setting and its transmission to prices.

At this stage of our reasoning, it is useful to clarify that, in all likelihood, lifting wages would lift prices and kick-start inflation. Real wages would not be affected, however. And in countries with floating exchange rates, any change in domestic inflation need not translate into the real exchange rate.

The situation could be seen as somewhat different in the euro area. Higher inflation in one member state would raise its real exchange rate. Part of the motivation of the Spanish labour market reforms of 2010–12 and the Finnish reform of 2016 was to bring these countries closer to a current account balance. A side effect of lower unit labour costs is lower wage inflation and lower price inflation. Therefore, the risk is that countries which have succeeded in lowering labour costs risk that these past efforts will have been wasted. It will be up to all social partners to ascertain local costs and benefits. What one can say is that the grand bargain can take place across the whole monetary zone and that therefore there could be an overall increase in all wages across the zone, bringing inflation more into line with price stability. The ECB might seek the cooperation of the European Commission to co-lead the bargaining with social partners and governments throughout the euro area (see, again, Ragot (2017) and Blanchard (2018)).

In order to succeed, this new approach through wage hikes would require the political will and skills to coordinate the social partners that set wages, as was done successfully in the five cases of disinflation reviewed above. The political will help, for instance, in repeating the ad hoc wage increases until realised inflation starts influencing the price and wage setters that have adaptive expectations. As frequently argued by the Bank of Japan, it is the accumulation of years with either deflation or very low inflation that have cemented a "low-inflation mindset" in that country.

The four ingredients identified above to shift the economy to a new nominal anchor would be: (i) the announcement of wages increases as the trigger; (ii) the support of social partners for the "consensus package"; (iii) expansionary and growth-friendly fiscal policies and (iv) the support of the central bank.

Several stakeholders would have the right incentives to act for the success of the package and stick to the agreement: wage earners and trade unions, for obvious reasons; governments, for additional fiscal income; and savers, for the prospect of interest rate normalisation. Finally, businesses would be able to raise prices in line with their unit labour cost increases. Last but not least, central banks would cease to be "the only game in town" while, if the plan works, the track record of keeping inflation near the inflation target would strengthen their credibility.

Let us briefly elaborate on how the communication of central banks can support the changes that will help such wage agreements to emerge and succeed. Because of the past history of rather inflation-prone environments, most central bankers have the Rogoff (1985) conservative central banker model in mind. To stabilise inflation that tends to drift too high, it makes sense for the central bank to have a clear preference for a lower inflation rate and express it clearly to society. According to textbook economics and a general look at disinflation in the 1980s, this has worked beautifully. A closer look at history shows that central banks have not hesitated to encourage wage bargaining agreements and labour market reforms to bring inflation down. Fiscal austerity has been important too – the example of Japan could yet again urge some caution.

Given that inflation has been undershooting inflation targets for several years now, some central bankers are considering updating the logic of Rogoff (1985). Barthélemy and Mengus (2018) and Mertens and Williams (2019) suggest, for instance, that central banks should demonstrate their commitment to stabilising inflation at the target level by letting inflation drift above target when the economy is adrift of the ZLB. These arguments have a lot of appeal in abstract models. In the real world, and as indicated by successes in the past, to engage with social partners would be a more direct and less uncertain route to exit an inflation equilibrium that is too low. Central banks should carry on communicating that a stable nominal anchor requires consistent increases in nominal income, including wages, and explaining to social partners the macroeconomic consequences of their actions. Setting up this type of coordination mechanism is, per se, a structural or institutional reform that would help macroeconomic stability.

## International coordination or, rather, leadership by example

That inflation is low in view of the levels of interest rates is a global phenomenon. This is important when seeking to understand the causes of the problem and also in adapting the policy response to this specific situation.

First, while exchange rates are very effective in influencing inflation, as can be seen in the United Kingdom, they are essentially relative prices that can help the adjustment of asymmetric shocks. For the United Kingdom, the depreciation of the sterling addresses a clear idiosyncratic shock: Brexit. Since 2016, the pound has depreciated by 20% with respect to the euro and 18% with respect to the dollar.

But the low inflation that manifests itself in a majority of OECD countries reflects common causes. This is not new. The co-movement of inflation across AEs has been very high since 1960 (Ciccarelli and Mojon (2010)). Part of this co-movement reflects changing policies and views on how to deal with inflation. Most central banks took many years to realise that productivity had decelerated in the 1970s. They tried to stimulate demand to close the output gap, not realising that they were in effect stimulating demand over capacity, in a way that accelerated inflation (Orphanides (2003)). They then triggered disinflation together in the early 1980s, including by engaging with trade unions as we have seen, and switched to inflation targeting-like regimes in the 1990s. And since the GFC, they have been confronted with anaemic demand at the zero/effective lower bound. In this context, there is a risk of a "Japanisation" of the global economy, whereby the role of the inflation target is undermined further by every additional year of undershooting.

What this common history of inflation also shows is that only one country needs to succeed for all the others to replicate its success. The focus of the Bundesbank on inflation in the 1970s, and its independence from the government, put Germany in the position to lend the credibility of the Deutsche mark to other member states in the EMS, as we saw for France and Italy. Thereafter, this influenced the emergence of inflation targeting as well as the establishment of the ECB as a highly independent central bank.

Likewise, at the current juncture, it would take one central bank to call for the type of tripartite agreement that Finland put in place in 2016. Government, trade and employer associations could decide on a path of wage increases and or indexation schemes until inflation stabilises in positive territory.

## 5. Conclusion

In view of the persistent undershooting of inflation with respect to their near 2% inflation targets, central banks need to reassess the efficiency of maintaining their current approach to stabilising inflation. In past exceptional circumstances, fiscal policy, wage and sometimes price controls have been coordinated by governments and social partners to shift the nominal anchor of the economy. This may come as a surprise given that wages are in most cases determined at the firm or the sectoral level. The fact is that, taken at the aggregate level, inflation largely reflects the average evolution of wages.

Henceforth, macroeconomic stability requires that nominal wages increase at a pace which is consistent with price stability. Central banks should recall this fact in their communication. In some cases, the central bank could clarify that wages are growing too fast. At the current juncture, central banks could similarly explain that too low wage inflation inevitably contributes to the persistent undershooting of inflation.

Of course, the complexity of the political economy factors that may hamper the success of our "consensus package" proposal cannot be underestimated. The case of Japan, where similar initiatives were attempted, should be more closely analysed. The setting of nominal wages by social partners at a pace consistent with a 2% inflation rate would be less "distortive" than the alternative approaches currently under discussion. These alternatives include keeping extremely accommodative financial conditions under "low for long or low forever" interest rates and/or resorting to helicopter money or MMT. We here simply recall the lessons of successful disinflationary episodes and suggest an exit strategy of the current low inflation trap that characterise several advanced economies. We suggest that the same combination of policies that worked (wage, price settings and an accompanying macro policy) are agreed by social partners and implemented in reverse. Central banks can explain the macroeconomic underpinnings of such "consensus packages". After all, coordinating inflation expectations is a core mission of central banks.

Finally, our proposal is obviously a complement to various other initiatives to increase aggregate demand (special investment funds to mitigate effects of climate change, to help transition to digital economy, as currently advocated by the OECD and the IMF). Our proposal meshes with these other initiatives by using fiscal space when it is available and usable from a political economy perspective. In the end, these policies will all serve the common good.

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