Monetary policy during an atypical recovery

Speech by Christine Lagarde, President of the ECB, at ECB Forum on Central Banking "Beyond the pandemic: the future of monetary policy"

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The economy is back from the brink, but not completely out of the woods. After a highly unusual recession, the euro area is going through a highly atypical recovery.

This atypical recovery is leading to rapid growth, but also to supply bottlenecks appearing unusually early in the economic cycle. It is also causing inflation to rebound quickly as the economy reopens. And it is helping to accelerate pre-existing trends and new structural changes brought about by the pandemic, which could have implications for future inflation dynamics.

But it is important today to take a step back. To understand how monetary policy should operate in this environment, we need to recognise where we have come from and where current trends suggest we are going. As John Maynard Keynes wrote, policymakers must always "study the present in light of the past for the purposes of the future".

We are coming from a decade of strong disinflationary forces that have depressed the whole inflation process. And while the robust recovery is supporting underlying inflation trends, what we are seeing now is mostly a phase of temporary inflation linked to reopening. Structural changes could create both upward and downward pressures on prices.

So, we still need an accommodative monetary policy stance to exit the pandemic safely and bring inflation sustainably back to 2%.

The inflation process before the pandemic

In the decade before the pandemic, inflation across advanced economies consistently surprised on the downside. The inflation process appeared to have slowed down along the transmission chain: from activity and employment to wages, and then from wages to prices. This was largely down to three factors.

First, gauging the true level of slack in the economy became harder.^[1] Estimates of structural unemployment were consistently revised down as the economy strengthened.^[2] And even as unemployment came down, many more people were drawn into the labour market, especially women and older people.^[3]

Second, structural changes in labour markets meant that receding slack fed more slowly into wage growth. Employment increased rapidly after 2013 but was mainly channelled into lower-paying jobs. In parallel, global forces – such as globalisation and automation – reduced workers' bargaining power.

Third, when wage growth did eventually pick up, firms were reluctant to pass on cost increases to consumers. Instead, we saw firms squeeze their profit margins. [6] This also reflected broader structural trends such as the digitalisation of services and the expansion of e-commerce. [7]

Recession and reopening

Then, the pandemic hit, which led to a highly unusual recession followed by a highly atypical recovery.

In conventional business cycles, the depth of the slump normally determines the pace of the recovery. After exceptionally deep recessions, both demand and supply are often impaired for many years. From the onset of the great financial crisis, for example, it took seven years for euro area GDP to get back to its pre-crisis level. Growth never reconnected with the trend we thought possible before 2008.

But during the pandemic, though GDP saw its steepest collapse on record, the overall economy has reopened largely intact, [8] We now expect GDP to exceed its pre-pandemic level by the end of this year – three quarters earlier than we forecast last December – and it should come close to reconnecting with its pre-crisis trend in 2023. From its trough, the recovery in GDP is the steepest in the euro area since 1975.

This outcome is largely attributable to the combined response of monetary and fiscal policy, which has preserved both demand and supply. For instance, real labour income fell by 3.6% in 2020, but household real disposable income dropped by only 0.2%, because government transfers filled the gap. This is in stark contrast with the sovereign debt crisis, when disposable income fell by 2% year-on-year.

The atypical nature of the recovery is creating frictions in the economy, which can produce opposing effects on growth and inflation.

In certain sectors, supply shortages are holding back production, which is unusual so early in the business cycle. ECB analysis finds that exports of euro area goods would have been almost 7% higher in the first half of this year were it not for supply bottlenecks. [9] These risks to growth could mount if the pandemic continues to affect global shipping and cargo handling as well as key industries like semiconductors.

At the same time, the reopening is also pushing up inflation, which reached 3% in August and is expected to rise further over the coming months. Higher inflation today is largely the result of two exceptional effects.

First, inflation collapsed last year when lockdowns were imposed, which is creating strong base effects as activity recovers. Half of total inflation in the euro area today is due to energy prices, which are making up the lost ground from 2020. Base effects from last year's German VAT rate cut and the unusual timing of sales periods are also playing a role.

In fact, the low inflation rate last year and the high inflation rate this year equal, on average, the inflation rate observed in 2019 before the pandemic. So the price level now is roughly the same as if inflation had remained stable at its pre-pandemic level.

Second, imbalances between demand and supply in some sectors are pushing prices up.

Goods inflation rose to 2.6% in August, well above its historical average of 0.6% as – in addition to base effects – global supply chain disruptions met a sharp recovery in demand for durable goods.^[10] Consumption of durables is already 1% above its pre-crisis trend,^[11] while shipping costs are around nine times higher today than in June last year.

Services inflation has also been rising – to 1.1% in $August^{[12]}$ – and it would have reached 2% using the consumption weights of last year, slightly above its historical average. This is also largely the result of demand returning to the sectors hardest hit by the lockdowns. Inflation in high-contact services accounts for virtually all of the rise we are seeing in services.

Once these pandemic-driven effects pass, we expect inflation to decline.

Base effects should drop out of the year-on-year calculation early next year, although we are seeing further increases in oil and gas prices.

It is harder to predict how long supply chain disruptions will last, but their ultimate impact on inflation will depend on how persistent they are and whether they feed through into higher than anticipated wage rises. Following the Japanese earthquake and nuclear disaster in 2011, production is estimated to have returned to normal after seven months for Japanese firms.^[13] However, given the special nature of the pandemic and the recovery, it cannot be excluded that the resolution of supply-side bottlenecks may take longer now.

Monetary policy should normally "look through" temporary supply-driven inflation, so long as inflation expectations remain anchored. Indeed, we are monitoring developments carefully but, for now, we see no signs that this increase in inflation is becoming broad-based across the economy. A "trimmed mean" [14] of inflation – which removes the items with the highest and lowest inflation rates – stood at 2.1% in August. Furthermore, wage developments so far show no signs of significant second-round effects.

Inflation expectations also do not point to risks of a prolonged overshooting. Long-term market-based measures have risen by around 50 basis points since the start of the year – to around $1.75\%^{[15]}$ – and survey-based measures have risen slightly to $1.8\%.^{[16]}$ This represents a move in the right direction. But it is still some distance away from our symmetric 2% target.

Inflation dynamics beyond the pandemic

In fact, looking beyond the pandemic, we expect inflation to only slowly converge towards 2%.

This is visible in the outlook for underlying inflation, which is a good indicator of where inflation will settle over the medium term. We currently project core inflation – which is one measure of underlying inflation – at 1.5% in 2023. Our survey of monetary analysts also points to a gradual convergence of inflation, which is expected to climb to 2% and stabilise at that level only five years from now.^[17]

This partly reflects the continuing pull of the structural factors that depressed inflation before the pandemic. But the pandemic has also created some new trends, which may have implications for the inflation outlook. Let me point to three.

The demand side

The first relates to changes on the demand side of the economy.

Historically, core inflation in the euro area has mostly been driven by services inflation, which has contributed 1.1 percentage points to the long-term average of 1.3 percentage points. This is both because services have a higher weight in consumption, [18] and because goods inflation has been held down by global forces of automation and competition.

Services inflation is closely linked to the strength of the domestic economy. It depends heavily on wage growth, as wages make up around 40% of the inputs for consumer services – double the share for goods. And robust domestic demand is crucial for a strong pass-through from wages to services prices.^[19]

So the key question today is whether the transition out of the pandemic could lift the outlook for domestic demand and thereby contribute to more dynamic services inflation. Here we see forces that point in different directions.

First, owing mainly to lockdowns, households are sitting on a large stock of savings that they have accumulated during the pandemic. Our new consumer expectations survey suggests that households

are not currently planning to spend those savings. But this might change if the economy continues along a dynamic recovery path, causing people to adjust their risk assessment.

Indeed, research suggests that consumption is influenced by people's past experience of recessions, and the previous recessions in the euro area hit consumers especially hard.^[20] From the onset of the great financial crisis and the sovereign debt crisis, it took seven years for consumption to get back to where it was at the start of 2008.

But by the end of 2022, we expect consumption to be almost 3% above its pre-pandemic level. And if that positive outlook is appropriately supported by the right policy mix, it could produce a virtuous circle, where people become more optimistic, upgrade their expectations of future income, and then spend more of the savings they have built up. This would help close the output gap from the demand side and put upward pressures on wages.

At the same time, there are forces that point to a slower pick-up in services inflation.

As I said in my speech here last year^[21], there are limits to how much services can be consumed, meaning they are unlikely to benefit from the same kind of pent-up demand as goods. At the end of the second quarter, services consumption was still about 15% below its pre-pandemic trend, even as restrictions were being eased.

The pandemic has also produced considerable slack in the labour market. Employment is now recovering quickly, but we have so far observed that labour force participation is rising even faster. This is good news for the economy, but it also means that we expect unemployment to fall below its pre-crisis level only in the second quarter of 2023, and wages to grow only moderately.

The supply side

The second trend is related to changes on the supply side of the economy.

The pandemic has delivered a major shock to global supply chains and domestic labour markets. It has significantly accelerated the process of digitalisation – by seven years in Europe, according to one estimate. [22] And it may have distributional consequences that lead to changes in social contracts. [23]

In the long run, some of these changes might dampen inflationary pressures.

For example, digitalisation could trigger a second wave of globalisation based on the virtualisation of services. It might lead to higher trend productivity, which could temper unit labour cost growth even as wage growth becomes stronger. And it could also shift activity more towards digital "superstar" firms that have considerable market power and whose pricing is less sensitive to the business cycle.^[24]

But over the coming years, there is also a chance that prices will be pushed up.

For instance, today's supply shortages may induce firms to diversify their supply chains or re-shore some of their production. Previous pandemics like SARS were found to have had this effect.^[25] That process could lead to higher cost structures that prioritise resilience over efficiency, which are then passed on to consumers. Geopolitics might also interfere in trade patterns and accelerate these shifts.

In parallel, faster digitalisation in Europe could initially create skill mismatches and scarcities, leading to wage increases even in the presence of persistent slack. The rate of job reallocations in major economies is estimated to double between 2019 and mid-2022.^[26] This dynamic could also be reinforced by a renewed focus on inequality, which could lead to upward pressure on wages via rising minimum wages.^[27]

The green transition

The third trend – which is probably the most important yet least explored – is the green transition, the shift towards a low-carbon economy.

The pandemic has given the green transition a boost. It could lead to an accelerated increase in auction prices in the EU Emissions Trading System, the introduction of carbon prices covering a wider range of economic activities, and the adoption of a Carbon Border Adjustment Mechanism – all of which could have a direct inflationary impact.

The Network for Greening the Financial System estimates that implementing ambitious transition policies in Europe could gradually increase inflation relative to its previous trend by up to one percentage point over the transition period, before returning to that trend.^[28]

The green transition is also likely to make the pass-through of energy prices to consumer prices more complex. As energy supply shifts towards renewable sources, it will no longer be sufficient to look mainly at oil prices: we will also have to understand the energy mix and how the different sources are linked and can be substituted for each other. Renewable energy in the euro area has increased from 5% of total available energy in 1990 to about 15% today. Similarly, the share of natural gas has increased from 17% to 24%. Oil, meanwhile, has dropped from 43% to 38%.

The ongoing rise in natural gas prices is testament to the complexity this creates, as that rise partly reflects unusually low wind energy production in Europe this summer and the need to fill the gap with conventional energy sources that can be mobilised quickly. This, in turn, is having knock-on effects on other industries that rely on natural gas, like fertiliser manufacturing, and the industries that are dependent on by-products of fertiliser production, such as food packaging.

So we will need to understand these various transmission channels better. The impact of the green transition on inflation will ultimately hinge on the development of energy supply and the net effects of fiscal measures.

The increased use of natural gas to stabilise electricity production is only a bridge technology and will over time subside as new technologies for energy storage and distribution are more widely deployed. And the impact of carbon pricing will depend on whether the additional revenue is used to cut other consumption taxes, such as electricity taxes or VAT, directly support vulnerable groups or foster green investment.

If it is not, there is a risk that higher carbon pricing might reduce purchasing power and lead to relative price changes that push down underlying inflation. Research finds that introducing carbon taxes in euro area countries tends to raise headline inflation but lower core inflation.^[29]

Policy implications

So how should monetary policy behave in this environment?

The key challenge is to ensure that we do not overreact to transitory supply shocks that have no bearing on the medium term, while also nurturing the positive demand forces that could durably lift inflation towards our 2% inflation target.

Our new forward guidance on interest rates is well-suited to manage supply-side risks. This guidance ensures that we will only react to improvements in headline inflation that we are confident are durable and reflected in underlying inflation dynamics. And the fact that inflation can move moderately above target for a transitory period allows us to be patient about tightening policy until we are certain that such improvement is sustained.

In terms of supporting demand, our monetary policy will continue to provide the conditions necessary to fuel the recovery. Indeed, our forward guidance has already led to a better alignment of rate expectations with our new inflation target, while helping to strengthen inflation expectations, which lowers real interest rates. We expect to see further progress toward an even tighter alignment between

the expected time of lift-off for our policy rates and the most likely inflation outlook as markets continue to absorb the rationale and key purpose of our forward guidance.

All this should provide a decisive boost to private spending once the uncertainty brought about by the pandemic fades, especially given the new investment needs created by the green and digital transition. The European Commission estimates that we need to see investment of around €330 billion every year by 2030 to achieve Europe's climate and energy targets^[30], and around €125 billion every year to carry out the digital transformation.^[31]

Going forward, the contribution of fiscal policy, and therefore the appropriate policy mix, will remain important. Fiscal policy is likely to stay supportive, with the cyclically-adjusted primary balance expected to be -4.1% this year, -1.6% next year and -1.5% in 2023. But the scope of pandemic-related fiscal transfers will need to change from a blanket-based approach to a more targeted action plan.

Fiscal policy will need to be surgical, meaning focused on those who have suffered particular hardship. It will need to be productivity-enhancing, meaning that it facilitates structural changes in the economy and shifts activity towards future-oriented sectors, and delivers on the agreed reform programmes under the Recovery and Resilience Facility. And, taking a medium-term perspective, fiscal policy will need to follow a rules-based framework that underpins both debt sustainability and macroeconomic stabilisation.

For our part, monetary policy is committed to preserving favourable financing conditions for all sectors of the economy over the pandemic period. And once the pandemic emergency comes to an end – which is drawing closer – our forward guidance on rates as well as purchases under the asset purchase programme will ensure that monetary policy remains supportive of the timely attainment of our medium-term 2% target.

Conclusion

Let me conclude.

The pandemic has caused a recession like no other, and a recovery that has few parallels in history. The inflation response reflects the exceptional circumstances we are in. We expect that those effects will ultimately pass.

But the pandemic has also introduced new trends that could affect inflation dynamics in the years to come. Those trends could produce both upward and downward price pressures. So, monetary policy must remain focused on steering the economy safely out of the pandemic emergency and lifting inflation sustainably towards our 2% target.

- 1. See Jarociński, M. and Lenza, M. (2018), "An Inflation-Predicting Measure of the Output Gap in the Euro Area", *Journal of Money, Credit and Banking*, Vol. 50, No 6, pp. 1189-1224; Eser, F., Karadi, P., Lane, P.R., Moretti, L. and Osbat, C. (2020), "The Phillips curve at the ECB", *The Manchester School*, Vol. 88, pp. 50-85; Koester, G., Lis, E., Nickel C., Osbat, C. and Smets, F. (eds.) (2021), "Understanding low inflation in the euro area from 2013 to 2019: cyclical and structural drivers", Occasional Paper Series, No 280, ECB, Frankfurt am Main, September.
- 2. In 2013, the European Commission estimated that structural unemployment (measured by the non-accelerating wage rate of unemployment (NAWRU)) in the euro area would rise to 11.6% in 2015. In 2019, after several years of strong demand growth, that rate was estimated at 7.7%.

- 3. The employment rate in the euro area rose to 73% by the end of 2019 the highest on record. The participation rate for women in the euro area reached a record high of 68.7% in the fourth quarter of 2019.
- 4. See Kouvavas, O., Kuik, F., Koester, G. and Nickel, C. (2019), "The effects of changes in the composition of employment on euro area wage growth", *Economic Bulletin*, Issue 8, ECB.
- 5. See Nickel, C., Bobeica, E., Koester, G., Lis, E. and Porqueddu, M. (eds.) (2019), "Understanding low wage growth in the euro area and European countries", *Occasional Paper Series*, No 232, ECB, Frankfurt am Main, September.
- 6. See Hahn, E. (2019), "How are wage developments passed through to prices in the euro area? Evidence from a BVAR model", *Applied Economics*, Taylor & Francis Journals, Vol. 53, No 22, May, pp. 2467-2485; Hahn, E. (2020), "The wage-price pass-through in the euro area: does the growth regime matter?", *Working Paper Series*, No 2485, ECB, Frankfurt am Main, October; Bobeica, E., Ciccarelli, M. and Vansteenkiste, I. (2019), "The link between labor cost and price inflation in the euro area", *Working Paper Series*, No 2235, ECB, Frankfurt am Main, February.
- 7. Anderton, R., Jarvis, V., Labhard, V., Morgan, J., Petroulakis, F. and Vivian, L. (2020), "Virtually everywhere? Digitalisation and the euro area and EU economies: Degree, effects, and key issues", *Occasional Paper Series*, No 244, ECB, December.
- 8. There is, however, still heterogeneity across sectors. For example, as of the second quarter of 2021 real gross value added in high-contact services was still 10.5% below its level in the fourth quarter of 2019, while the overall economy was only 2.5% lower. See Battistini, N. and Stoevsky, G. (2021), "The impact of containment measures across sectors and countries during the COVID-19 pandemic", *Economic Bulletin*, Issue 2, ECB.
- 9. Frohm, E., Gunnella, V., Mancini, M. and Schuler, T. (2021), "The impact of supply bottlenecks on trade", *Economic Bulletin*, Issue 6, ECB.
- 10. Shifts in the timing of seasonal sales are also playing a role.
- 11. At the end of the second quarter.
- 12. The weights of the Harmonised Index of Consumer Prices (HICP) were updated in January 2021 reflecting the changes in consumption patterns brought about by the pandemic.
- 13. See Boehm, C.E., Flaaen, A. and Pandalai-Nayar, N. (2019), "Input Linkages and the Transmission of Shocks: Firm-Level Evidence from the 2011 Tōhoku Earthquake", *The Review of Economics and Statistics*, MIT Press, Vol. 101, No 1, March, pp. 60-75.
- 14. The trimmed means remove around 15% from each tail of the distribution of price changes in the euro area HICP each month.
- 15. Five-year forward five years ahead inflation-linked swap.
- 16. ECB (2021), Survey of Professional Forecasters, July.
- 17. ECB Survey of Monetary Analysts, September 2021.
- 18. Services are 61% of the core HICP basket.

- 19. When demand is higher, firms can pass on cost increases over-proportionally, such that profit margins increase. See Gumiel, J. E., and Hahn, E. (2018), "The role of wages in the pick-up of inflation", *Economic Bulletin*, Issue 5, ECB, Frankfurt am Main.
- 20. See Malmendier, U. and Sheng Shen, L. (2018), "Scarred Consumption", *NBER Working Paper*, No 24696.
- 21. See Lagarde, C. (2020), "Monetary Policy in a Pandemic Emergency", keynote speech at the ECB Forum on Central Banking, Frankfurt am Main, 11 November.
- 22. See McKinsey (2020), "How COVID-19 has pushed companies over the technology tipping point—and transformed business forever", October.
- 23. See Basso, G., Boeri, T., Caiumi, A. and Paccagnella, M. (2020), "The New Hazardous Jobs and Worker Reallocation", OECD Social, Employment and Migration Working Papers No. 246.
- 24. Kouvavas, O., Osbat, C., Reinelt, T. and Vansteenkiste, I. (2021), "Markups and inflation cyclicality in the euro area", mimeo.
- 25. See Shingal, A. and Agarwal, P. (2020), "How did trade in GVC-based products respond to previous health shocks? Lessons for COVID-19", *EUI RSCAS Working Paper*, No 2020/68, Global Governance Programme 415.
- 26. Anayi, L., Barrero, J. M., Bloom, N., Bunn, P., Davis, S., Leather, J., Meyer, B., Oikonomou, M., Mihaylov, E., Mizen, P. and Thwaites, G. (2021), "Labour market reallocation in the wake of Covid-19", VoxEu, 21 August.
- 27. CengizDubeLindnerZipperer, D., , A., , A. and , B. (2019), "The Effect of Minimum Wages on Low-Wage Jobs", *The Quarterly Journal of Economics*, Vol. 134, Issue 3, August, pp. 1405-1454.
- 28. Network for Greening the Financial System (2021), "NGFS Climate Scenarios for central banks and supervisors", slide deck, June.
- 29. McKibbin, W., Konradt, M. and Weder di Mauro, B. (2021), "Climate Policies and Monetary Policies in the Euro Area", paper for ECB Forum 2021.
- 30. European Commission (2020), "Impact Assessment" accompanying the document "Stepping up Europe's 2030 climate ambition: Investing in a climate-neutral future for the benefit of our people", 17 September.
- 31. European Commission (2020), "Identifying Europe's recovery needs", 27 May.

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