Stabilisation policies in a monetary union

Speech by Mario Draghi, President of the ECB, at the Academy of Athens

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The resilience of the euro area through many years of crisis has proven its critics to be wrong. Several countries, not least Greece, have undertaken remarkable efforts in order to thrive as members of the monetary union. Important institutional reforms have taken place to strengthen the euro area, notably the creation of the banking union and the European Stability Mechanism (ESM). As I have outlined elsewhere, the euro has been beneficial in many ways,[1] and today the single currency is more popular than ever.[2]

But the fact that the crisis lasted much longer here than in other advanced economies – and came with a substantial social cost – still weighs on perceptions of our monetary union. Have we learned the lessons of that episode? And have we taken the necessary steps to prevent such an outcome in the future? These are the questions I would like to address today.

The answer comes down to whether the euro area has increased its ability to stabilise macroeconomic shocks. In this regard, there are two key dimensions that matter.

Stabilisation across countries

The classical perspective on stabilisation in a monetary union is provided by the optimum currency area (OCA) theory. This principally focuses on the cross-country dimension, i.e. how to ensure that sharing a single monetary policy and exchange rate does not deprive some members of the capacity to adjust to shocks. While the literature lists several criteria that are important, the key is the balance between convergence and insurance.[3]

There needs to be enough convergence across states such that they largely face common shocks, and so a single monetary policy is broadly appropriate for all members. However, effective insurance mechanisms also need to be in place – based on diversification across the currency union – so that states can still stabilise their economies when their local cycles diverge. In such situations, by design, insurance becomes more effective.

Take the US as an example. Shocks are relatively similar across states, which underpins the common monetary policy.[4] But local cycles still deviate from the aggregate cycle.[5] So, both private and public insurance are in place to compensate.

In the private sector, integrated credit markets allow cross-border banks to offset losses in one region against gains in another, which helps maintain the provision of credit in all regions throughout the cycle. Portfolio diversification through capital markets allows households to support their income during downturns via gains on financial holdings in better performing parts of the union. It is estimated that around...
Public insurance works through similar principles. The Federal Deposit Insurance Corporation (FDIC) allows banks in different states to insure each other against failure, backstopped by a credit line from the US Treasury. The federal budget complements the state-level automatic stabilisers, smoothing a further 10% of shocks.²

Twenty years after its launch, it is important to assess how the euro area compares in terms of convergence and insurance.

In terms of real convergence, several euro area countries have achieved significant progress, particularly the Baltic States, Slovakia and, to a lesser extent, Malta and Slovenia. The gap between real GDP per capita in these countries and the euro area mean has been reduced by around one-third since 1999.³ However, other countries that also started far from the euro area average – such as Portugal and Greece – have, on balance, been unable to close the gap significantly.

Real convergence in income per capita is important for the cohesion of a monetary union, so it is vital that the right national and European policies are in place to help countries that have fallen behind since the crisis to re-converge, in particular Greece. At the same time, a slower pace of real convergence does not necessarily prevent a monetary union from being able to stabilise its economy effectively.

What matters more is business cycle convergence, since this determines the optimality of monetary policy across states. And business cycles can converge long before income levels do. In the US, for example, GDP per capita in the richest state is still around twice that of the poorest state, which is roughly the same gap as in the euro area today.⁴ But US states have had relatively correlated cycles since around the 1930s.⁵

When the euro area was established, there were conflicting views on how cycles would respond. According to the "specialisation hypothesis", monetary union would allow countries to exploit their comparative advantages and increase inter-industry trade. This would expose countries to different industrial shocks, and business cycles would become less correlated.⁶ The alternative view was the "endogeneity hypothesis", which held that the euro would lead to greater intra-industry trade. Industrial structures would therefore become more similar and cycles more synchronised.⁷

What few foresaw at that time, however, was the rapid emergence of global value chains (GVCs) in both global and euro area trade and how this would affect the transmission of shocks. Between 1990 and 2015, the average ratio of intermediate goods exports to GDP – a measure of value chain integration – increased more than twofold globally, but nearly fourfold in the euro area. In 2014, participation in GVCs – the share of gross exports consisting of value added which crosses multiple borders – was around 20 percentage points higher in euro area countries than in the US or China.⁸

Value chains increase both specialisation and synchronisation,⁹ since demand shocks are transmitted along the supply chain. In fact, trade along value chains has been found to generate more synchronisation than trade in final goods.¹⁰

Consistent with this, multiple studies find that business cycle synchronisation in the euro area has risen since 1999.¹¹ A substantial share of the variation in GDP growth across euro area countries can now be explained by a common factor that is not shared with other G7 economies.¹² Overall, growth dispersion among euro area countries is now at the same low level as among US states – and roughly half the level before the crisis.¹³

The single market has played a key role in trade integration, but the euro has also contributed. New ECB research finds that the euro has facilitated trade creation and the emergence of GVCs within the euro area, especially between "old" and "new" Member States since 2007.¹⁴ One recent meta-study finds that being part of the monetary union can explain at least half of the overall increase in business cycle correlation among euro area countries since 1999.¹⁵

Countries' participation in value chains nonetheless varies, with some more exposed to agglomeration effects than others.¹⁶ This underlines the need to continue deepening and broadening the single market, so that all member states are well integrated into the European value chain and share in the common business cycle.

But just as in the US, euro area countries are still exposed to idiosyncratic shocks due to their trade...
structures, as we see in Germany today. And in contrast to the US, common shocks can have asymmetric effects due to different levels of public debt, as we saw during the crisis. Consequently, IMF analysis finds that, while business cycles have become more synchronised during the euro period, their amplitude across euro area countries has diverged since the crisis.\textsuperscript{[22]}

So, to address this, there needs to be insurance across euro area countries, and such insurance is also likely to be highly effective, perhaps even more so than in the US.\textsuperscript{[23]}

Progress in this area is much less advanced, however. Only around 25% of local shocks are smoothed through financial markets in the euro area.\textsuperscript{[24]} We still do not have in place the ESM backstop for the single resolution fund and a European deposit insurance scheme. And there has been little meaningful progress on fiscal policy coordination. Long ago we reached an impasse on key issues which is being perpetuated by two alleged dichotomies.

The first is the notion that private and public insurance are substitutes, and so if the euro area focuses on deepening private risk-sharing, greater public risk-sharing will not be required. But this misunderstands how private insurance develops in the first place. It emerges from deep and resilient financial integration, especially of retail banks, and that only arises in the shelter of public risk-sharing, such as strong backstops and deposit insurance schemes.

The reason is that public insurance guarantees that costs will be shared in the event of bank failures, which is crucial for national authorities to let capital and liquidity flow freely within the monetary union. Without insurance, on the other hand, there will always be an incentive to ring-fence in order to safeguard national balance sheets, which blocks effective risk sharing.\textsuperscript{[25]} US banks, for instance, rely on intra-group funding to respond to local shocks and manage credit growth, allowing them to keep their lending more stable over the cycle.\textsuperscript{[26]}

Similarly, without public insurance, banks have a weaker business case to engage in cross-border consolidation. Some of the key benefits of operating multinationally – such as the ability to optimise liabilities by funding loans in one country with deposits in another – cannot be attained if there are different deposit guarantee schemes across countries, and different creditor hierarchies in an insolvency scenario. This is one reason why cross-border banking M&A activity within the euro area is currently at historical lows.\textsuperscript{[27]}

In any event, private risk-sharing based on diversification can break down in the face of large common shocks, as happened to some extent in the US during the crisis. One study finds that capital market risk-sharing in the US dropped by almost half in the crisis period.\textsuperscript{[28]} Thus, private insurance cannot ever fully substitute for effective public risk-sharing.

The second alleged dichotomy is the notion that public insurance creates moral hazard, and therefore risks have to be reduced before they can be shared. But this overlooks both the theoretical and empirical evidence we have on the incentive-effects of risk-sharing. There is a wealth of evidence that moral hazard depends on the appropriate design of insurance schemes.\textsuperscript{[29]} And what we see in practice is that the absence of insurance does not lead to lower risks, either for individual countries or for the euro area as a whole.

This is because the assumed mechanism – that the absence of backstops leads to market discipline on governments, which in turn promotes reforms – is not reflected in reality. ECB research going back to 1975 finds no convincing evidence that high interest rates lead to reforms, if one controls for the business cycle and other factors.\textsuperscript{[30]}

On the contrary, when countries are under market pressure, they are typically either compelled to enter macroeconomic adjustment programmes, or they enact reforms that are poorly designed and easily reversed. This normally means, among other things, consolidating budgets by raising taxes, which makes the recession worse. And when several countries are in this position, because backstops are not in place to arrest contagion, it spreads and prolongs the crisis for the whole monetary union.

We saw this clearly in the euro area in 2010-12. Economies representing one-third of euro area GDP were forced into a pro-cyclical fiscal stance to shore up confidence in their public debt, which was a factor that led to the euro area’s second recession. In other words, lack of insurance actually raised risks. In contrast, an effective, quasi-automatic euro area fiscal backstop, with proper eligibility criteria, could have stabilised expectations and led to a more appropriate fiscal stance. This is one reason why I have called on several occasions for a euro area fiscal instrument of adequate size and design.
The same is true in the financial sector. Without public insurance, in a crisis markets typically panic and begin fire sales, which propagate risk. Appropriate backstops, on the other hand, help stabilise market expectations and reduce risks. The role of the FDIC in the aftermath of the Lehman collapse is a good example of this. During that period, around 500 banks were resolved without triggering financial instability. In contrast, one estimate puts the total number of banks resolved in the euro area in the same period at around 50.\[31\] In the absence of credible backstops, the clean-up of the euro area’s banking sector took considerably longer.

Today, it is estimated that a public backstop for the whole euro area would have the same credibility as that of the US, thereby significantly reducing risks in a crisis. But if national governments are still expected to backstop their own banks, countries such as France or the Netherlands could face potential fiscal costs of 10-12% of their GDP.\[32\]

All this should make it clear that deepening public insurance by completing the banking union and strengthening fiscal union is not about creating a transfer union. It is about creating a euro area in which there is less need for public risk-sharing in future, because we have the instruments in place to stabilise crises more quickly, and because we have the right framework to allow private sector risk-sharing to develop more sustainably.

Moving in this direction is evidently politically difficult. But that should not stop us from identifying the problems and making the case for fixing them, so that we can build a monetary union in which convergence is truly balanced by insurance.

**Stabilisation over the cycle**

Stabilisation in a monetary union also has an aggregate dimension – that is, how all policies combine to ensure support for growth over the cycle. This was not much addressed in the OCA literature, which rested on the classical notion that monetary policy should respond to common shocks and fiscal policy to local shocks. This made sense in the conditions prevailing at the time. But it needs to be re-examined in the new environment we face today.

The defining feature of this new environment is the secular decline in the natural rate of interest, which is the rate that in principle balances desired saving and planned investment in the economy. The natural rate is a difficult and intangible concept, but we can nonetheless intuit, from certain long-term trends, that it has been on a downward path.

The most important trend is slowing potential growth across advanced economies, and in particular slowing total factor productivity (TFP) growth, which implies a lower rate of return on capital. As potential growth falls, borrowing costs for the private sector have to fall as well, since firms will only borrow at a price that is below their expected rate of return on investment. Over time, this creates a downward pull on interest rates. Since the 1990s, long-term real yields have fallen by over 400 basis points in the US, over 500 basis points in Japan and over 600 basis points in Germany.\[33\]

We can get a sense of this dynamic if we compare the economy in the US in the 1990s with that today. In the 1990s, with inflation around 2-3%, and potential growth thought to be around 3-4%, nominal policy rates at 3% were seen as highly accommodative.\[34\] Now, with lower inflation and long-term growth expected to be 1.5-2%, nominal interest rates at that level would be seen as extremely tight and trigger a recession.

But the size of the decline in real yields since the 1990s also reflects other secular factors that have arisen since then. These have depressed interest rates *even relative to growth* by encouraging people to save more and invest less.

The most powerful is adverse demographics. In the euro area, the demographic transition is estimated to have reduced real interest rates by around one percentage point over recent decades. On current trends it can be expected to depress real rates by a further 0.25-0.5 percentage points by 2030.\[35\] Other studies have pointed to the role of rising income inequality, where increasingly rich households save more of their permanent income,\[36\] an excess of global saving especially in emerging markets,\[37\] and a general increase in risk aversion, which is captured in a rising demand for safe assets.\[38\]

The upshot is that, across a range of estimates, the natural rate in the euro area has been trending down to very low levels. Estimates for the US are slightly higher but display the same downward path.\[39\] This has important repercussions for monetary policy, namely in that any interest rate set by the central bank...
that is not in line with the trend of the natural rate would be contractionary. Thus trying to raise rates too
quickly would be self-defeating, since it would only lead to growth and inflation falling and rates having to
be cut once more.

In fact, if such a stance caused a longer slump and a rise in uncertainty about monetary policy, it could
even lead to ‘hysteresis effects’ in investment and risk sentiment.\[40\] That would in turn depress TFP
growth further and cause the natural rate to fall more.

This environment has two key implications.

The first is that the optimal policy mix to stabilise the economy changes. With a falling natural rate, the
effective lower bound on interest rates becomes more salient. Before the crisis, it was estimated that rates
were likely to hit zero in the euro area roughly once every 50 years.\[41\] Now, monetary policy increasingly
has to use unconventional policies to achieve its mandate, and to do so for longer and with more intensity.
This is not a barrier to the central bank achieving its objective, but it increases the risk of side effects along
the way.

In contrast, fiscal policy playing a more supportive role alongside monetary policy would lead to a faster
return to price stability and therefore fewer side effects. This is because fiscal policy becomes more
powerful when monetary policy is close to the effective lower bound, as the multipliers are higher.\[42\]
Furthermore, in certain situations, supportive fiscal policy can complement monetary policy in cutting
through the obstacles that are weighing on demand – which is the case in the euro area today.

A main driver of the weak outlook at present is heightened uncertainty, which is triggering “paradox of thrift”
behaviour in parts of the private sector. Uncertainty encourages higher saving which compresses demand
and incomes, which in turn feeds back into more uncertainty and lower, not higher, saving. Fiscal policy
can break this vicious circle since, with its greater multipliers, it can push incomes and income
expectations higher.

Moreover, while there may be limits to how much households can bring forward future income in response
to lower borrowing costs, governments can in principle raise their future income through their spending
today. This is the case if government spending raises productivity and thereby future potential output,
which increases fiscal space today.\[43\] Higher expected growth in turn makes private sector transmission
more effective.

This is not about policy coordination. Our framework in the euro area is built on monetary dominance,
where the central bank decides its policy independently based on price stability considerations alone.
Rather, if governments want to see a faster exit from unconventional policies, it is in their interests to align
with monetary policy. But this is not what we have seen up to now. From 2009 to 2018, the average
cyclically-adjusted government primary balance\[44\] was -5.7% for Japan and -3.6% for the US, but 0.5% for
the euro area.

The second implication of the falling natural rates is that other policies are required for interest rates to rise
significantly in the future. While monetary policy has to treat the natural rate as given, both structural and
fiscal policies can raise it.

Structural policies can accelerate resource re-allocation, innovation and the diffusion of new technologies,
all of which raise TFP.\[45\] Efficient public spending can increase productivity through, for example,
improving education systems or public investment in key infrastructures. The financing of that investment
through debt issuance can increase the supply of safe assets and help absorb excess saving. Fiscal
policies can also be used to reduce inequality and encourage greater labour force participation among
older workers, thereby lowering saving. In fact, new estimates suggest that the use of these types of fiscal
policies in advanced economies in recent decades has prevented the natural rate from falling further.\[46\]

At the same time, well-targeted macroprudential policies can help temper the side effects of low interest
rates in the transition period while these policies come into full effect.

The gains at the national level from such measures would be significant where there are large domestic
investment needs and reform gaps. In all large euro area countries, net public investment\[47\] has
essentially been zero over the last decade. The share of productive expenditure in total primary
expenditure – which in addition to infrastructure includes R&D and education – has also dropped in nearly
all euro area economies since the crisis.\[48\]
As an illustration of the effects of higher investment, ECB model-based analysis finds that, in an economy like Germany, raising productive public investment by 1% for 5 years could ultimately yield GDP up to 2% higher and private investment up to 2% higher. Moreover, if the most indebted countries were to couple public investment with structural reforms to raise future growth, higher borrowing would create fewer uncertainties about debt sustainability.

The impact would be greater still if euro area countries were to coordinate their policies, and especially when those actions are aligned with the forward guidance provided by monetary policy. ECB simulations find that the spillovers from coordinated investment spending in the euro area are up to six times larger when the central bank does not increase interest rates in response. As the decline of the natural rate is a common challenge, with common causes and consequences, the case for coordination among countries is strong.

The most effective response, however, would be an investment-led stimulus at the euro area level. This would be the best way to achieve an efficient distribution of spending among euro area countries – and is a further reason why I have called for a euro area fiscal instrument. The agreement on the Budgetary Instrument for Convergence and Competitiveness is a step in the right direction, but it does not yet meet the necessary criteria in terms of size or design.

Whichever route is taken, monetary policy will continue to do its job. The latest decisions of the Governing Council have shown its determination in the face of a continuously weakening outlook for growth and inflation.

Consistent with our monetary dominance framework, these decisions are intended to ensure that inflation returns to our objective without undue delay. But if fiscal and structural policies also play their role in parallel – and more so than we see today – the side effects of monetary policy will be less, and the return to higher rates of interest will be faster.

Timely and effective policy actions, however, are of the essence. The fact that interest rates have been able to rise faster in the US than in the euro area since the crisis is, in no small part, because fiscal policy there has played a greater role alongside monetary policy. By the same token, lack of policy alignment in Japan in the face of decades of deflationary forces eventually led to a situation where both monetary and fiscal policy had to be extremely accommodative to jolt the economy out of entrenched disinflation.

Conclusion

This brings me to my conclusion.

Policymakers have a responsibility to learn the lessons of the past, to study the experiences of others, and to avoid foreseeable risks to the public by altering their policies today.

Our monetary union was born incomplete and, within a decade, faced a crisis few could have anticipated. It is understandable that it was not ready. But we know now what it takes to provide stabilisation across countries, and we know what we risk if we act too late to stabilise the union as a whole. This only leads to a longer period of highly accommodative policies.

We want to determine our circumstances, not to have our hand forced by them. The diagnosis of what needs to be done is clear. The roadmap has been laid out.

[1] See Draghi, M., “Europe and the euro 20 years on”, speech by Mario Draghi, President of the ECB, at Laurea Honoris Causa in Economics by University of Sant’Anna, Pisa, 15 December 2018.


sovereign yield. The decline since the 1990s reflects a mix of trend and cyclical factors.


[33] The real yield is calculated by subtracting the 6-10 year Consensus Economics inflation expectations from the respective 10-year sovereign yield. The decline since the 1990s reflects a mix of trend and cyclical factors.
The Federal Funds target rate was held at 3% between September 1992 and February 1994.


As a percentage of potential GDP.

See Draghi, L., “Moving to the Frontier: Promoting the Diffusion of Innovation”, Welcome address at the joint conference by the ECB and the MIT Lab for Innovation Science and Policy, 13 March 2017.


Adjusted for depreciation.

European Fiscal Board, “Assessment of the EU fiscal rules with a focus on the six and two-pack legislation”, August 2019.

de Jong et al (2017), op. cit. If the investment in public capital is not productive, then the net effect on GDP is zero after the stimulus ends.
