

The central bank, growth and the European construction

The first decade: the construction holds

It is a pleasure to give the Karl Brunner lecture.

Karl Brunner was one of the economists whose ideas shaped what would become the monetary constitution of Europe.

In 1968, he introduced the term "monetarism" into the current vocabulary of economics. With Milton Friedman and others, he helped re-establish the view that inflation is a monetary phenomenon and that responsibility for the price level rests with the central bank.¹

Yet Brunner was equally clear about the limits of that responsibility. The central bank could not deliver price stability alone. It needed a fiscal authority whose incentives were compatible with its own.²

If a government ran permanent deficits large enough for its debt to keep rising relative to output, the pressure to monetise that debt would build. Over time the two regimes could not coexist, and the monetary regime was the more likely to give way.³

These ideas are recognisable in the Maastricht Treaty. It gave the ECB independence and a primary objective of price stability. And it created the separation between monetary and fiscal policy necessary to make independence sustainable: the prohibition on monetary financing, the no bail-out clause and the excessive deficit procedure.⁴

Whether that separation holds in practice, however, depends on more than rules. Ultimately it turns on the relationship between borrowing costs and growth, or r minus g in shorthand.⁵

If the interest rate a government pays on its debt is above the growth rate of the economy, the debt ratio rises by itself unless the government runs a primary surplus. The wider the gap, the larger the surplus that is needed, and the stronger

¹ Brunner, K. (1968), "The Role of Money and Monetary Policy", *Federal Reserve Bank of St. Louis Review*, 50(7); Moser, T. and Savioz, M. (eds.) (2022), *Karl Brunner and Monetarism*, MIT Press. The 1968 article introduced the label "the Monetarist position".

² Brunner, K. (1986), "Deficits, Interest Rates, and Monetary Policy", *Cato Journal*, 5(3).

³ Brunner (1986), op. cit.

⁴ ECB (2021), "Monetary-fiscal policy interactions in the euro area", *ECB Occasional Paper Series*, No 273.

⁵ ECB (2021), op. cit.

the temptation to pressure the central bank to monetise. The same relationship was central to Brunner's own analysis.⁶

The European framework contained two implicit assumptions about how r and g would be kept close.

The first was that growth would be delivered by other policies.

Monetary policy was seen as neutral in the long run and fiscal policy could at best smooth the cycle. Growth would have to come from the supply side, especially from completing the single market, and monetary union was expected to reinforce those gains.⁷

The reference values in the EU fiscal rules assumed this growth would be relatively strong. A deficit of 3% of GDP stabilises debt at 60% of GDP only if nominal growth is 5% a year. At the time that meant real growth of around 3% and inflation of around 2%.⁸

But while fiscal policy was governed by explicit rules and enforcement procedures, growth was largely taken for granted. After 1992, with no common timetable, progress on the single market slowed and was never completed. National structural policies were coordinated only through recommendations that carried no sanction.

The second assumption was that a central bank doing its job and governments following the rules would, together, bring interest rates down.

A credible central bank lowers the premium investors demand for inflation risk. Sound public finances lower the premium they demand for holding government debt. With both falling, r would move towards g . And lower interest rates would in turn support investment and growth, so that the process would sustain itself.

This is broadly what happened during the Great Moderation, in two stages.

In the 1990s, governments across advanced economies reduced deficits while central banks anchored inflation expectations. Long-term interest rates fell

⁶ Brunner (1986), op. cit.

⁷ ECB (2021), op. cit.; Gaspar, V. and Buti, M. (2021), "Maastricht values", *VoxEU*, 8 July; European Commission (1988), "The Economics of 1992", *European Economy*, No 35; European Commission (1990), "One Market, One Money", *European Economy*, No 44.

⁸ Gaspar and Buti (2021), op. cit.

steadily. Estimated term premia fell with them, most sharply where central banks were strengthening monetary policy frameworks.⁹

Countries preparing for the euro benefited twice, from this process and from convergence towards the single currency. Governments determined to join ran primary surpluses of between 2% and 3% of GDP on average in the late 1990s.¹⁰

The prospect of the euro took the devaluation risk out of their debt. By 1999, long-term yields in Italy and Spain had fallen by more than 8 percentage points since the start of the decade, to around 4%, compared with a drop of around 3 percentage points in the United States.¹¹

Then, in the euro's first decade, growth followed. Lower rates lifted activity most strongly in the periphery, as capital flowed in from the core and credit and investment expanded. From 1999 to 2007 the euro area grew at a little over 2% a year in real terms, somewhat below the 3% the fiscal rules had assumed.¹²

That growth kept r close to g : over those years the gap between the average interest rate on euro area government debt and nominal growth averaged 0.6 percentage points.¹³ The central bank could meet its mandate with the policy rate alone, and its independence was not seriously tested.

But there were warning signs in the construction.

Growth came more from credit and convergence than from the single market reforms the framework had counted on. The primary surpluses of the late 1990s reflected an exceptional effort to qualify for the euro: they were far above the average since 1960, which was close to zero.¹⁴ Once they faded, keeping debt stable would depend on growth keeping pace with interest rates.

For a decade, then, the construction held. But it had not yet been tested by a period in which r and g moved apart.

⁹ Wright, J.H. (2011), "Term Premia and Inflation Uncertainty: Empirical Evidence from an International Panel Dataset", *American Economic Review*, 101(4).

¹⁰ Coenen, G., Mohr, M. and Straub, R. (2008), "Fiscal consolidation in the euro area: long-run benefits and short-run costs", *ECB Working Paper Series*, No 902 (cyclically adjusted, euro area aggregate, 1996–2000).

¹¹ Swanson, E. (2008), "Convergence of Long-Term Bond Yields in the Euro Area", *FRBSF Economic Letter*, 2008-37, 21 November.

¹² Buti, M. and Gaspar, V. (2008), "The first ten years of the euro", *VoxEU*, 24 December.

¹³ ECB (2021), *op. cit.*

¹⁴ IMF, Public Finances in Modern History database, documented in Mauro, P., Romeu, R., Binder, A. and Zaman, A. (2015), "A modern history of fiscal prudence and profligacy", *Journal of Monetary Economics*, 76; European Commission, AMECO database; 11 founding members plus Greece, GDP-weighted, 1960–94 against 1997–99; own calculations.

The 2010s: the central bank acts to protect the construction

The financial crisis, and the sovereign debt crisis that followed, provided that test.

The growth that had rested on credit disappeared. And interest rates across countries diverged again as investors began to doubt the public finances of several countries. The gap between r and g on euro area debt widened to 2.8 percentage points over 2008–11.¹⁵

With growth collapsing and r moving away from g , the macroeconomic authorities had to step in and take responsibility for growth. During the first part of the financial crisis, governments did so. In 2009 and 2010 fiscal and monetary policy were both strongly expansionary.¹⁶

But once the sovereign debt crisis began, governments fell back on the lesson of the 1990s, that consolidation would bring interest rates down. Some went further and believed it would raise growth as well, by restoring confidence in the public finances.¹⁷

The fiscal stance therefore tightened sharply. Between 2010 and 2013 the euro area's cyclically adjusted balance tightened by 3.7% of GDP.¹⁸ Worse, this included countries that were not under market pressure.

But the conditions were now different. In the 1990s the private sector expanded as interest rates fell. In 2010 banks and firms were deleveraging and could not fill the gap left by the state, so fiscal multipliers were unusually high.¹⁹

The result was that consolidation acted on growth more than on interest rates. From the second quarter of 2011 until the first quarter of 2013, growth was flat or negative for eight quarters in a row. By then output in the euro area was

¹⁵ ECB (2021), op. cit.

¹⁶ ECB (2021), op. cit.

¹⁷ Alesina, A. and Ardagna, S. (1998), "Tales of fiscal adjustment", *Economic Policy*, 13(27); Alesina, A. (2010), "Fiscal adjustments: lessons from recent history", paper prepared for the Ecofin meeting, Madrid, 15 April.

¹⁸ European Commission, AMECO database, cyclically adjusted net lending, euro area, % of potential GDP, 2010–13; own calculations.

¹⁹ Blanchard, O. and Leigh, D. (2013), "Growth Forecast Errors and Fiscal Multipliers", *American Economic Review*, 103(3).

around 3½% below its potential. ECB simulations suggest that, had fiscal policy leaned against the downturn, the shortfall would have been about half as large.²⁰

This same weakness in demand fed through to monetary policy, because its effect was disinflationary for the whole euro area. Core inflation fell to 0.6% in January 2015, and longer-term inflation expectations fell to around 1.5%. Restoring price stability required monetary policy to become highly expansionary.

That brought weak growth inside the central bank's concerns. With no other policy supporting demand, lifting the economy was the channel through which monetary policy could bring inflation back to target. This required the central bank to act on a scale, and with instruments, it had not used before.

Rates were cut to zero and then below it. If markets believe that zero is the floor, then once rates reach zero the only direction they can move is up, and that expectation is priced into the whole yield curve. Removing that floor therefore had an effect larger than the size of the cuts would suggest. At its peak, the negative rate policy is estimated to have added around 0.3 percentage points to annual GDP growth and 0.2 points to inflation.²¹

To reach longer-term rates, the central bank bought assets, above all government bonds. This worked through a channel that Brunner, in his long collaboration with Allan Meltzer, had helped to develop: monetary policy acts through the relative prices of the whole range of assets, not through a single interest rate.²²

Assets are imperfect substitutes for one another. When the central bank buys long-dated bonds, investors who sell them move into other assets: the bonds of other member states, bank bonds, corporate debt. The premium falls on all of them, and financing conditions ease across the economy.²³ In the euro area, where the government bond market is split along national lines, that effect is if anything stronger.

²⁰ ECB (2021), op. cit. (ECB-BASE simulations); see also Bańkowski, K., Christoffel, K. and Faria, T. (2021), "Assessing the fiscal-monetary policy mix in the euro area", *ECB Working Paper Series*, No 2623.

²¹ Rostagno, M., Altavilla, C., Carboni, G., Lemke, W., Motto, R. and Saint Guilhem, A. (2021), "Combining negative rates, forward guidance and asset purchases: identification and impacts of the ECB's unconventional policies", *ECB Working Paper Series*, No 2564. Peak effect in 2018. See also Rostagno, M., Altavilla, C., Carboni, G., Lemke, W., Motto, R. and Saint Guilhem, A. (2025), "An options-based impact study of the negative interest rate policy and forward guidance", *Journal of Monetary Economics*, 152.

²² Brunner (1968), op. cit.; Brunner, K. and Meltzer, A.H. (1976), "An aggregative theory for a closed economy", in Stein, J.L. (ed.), *Monetarism*, North-Holland.

²³ ECB (2021), op. cit.; Rostagno, M., Altavilla, C., Carboni, G., Lemke, W., Motto, R., Saint Guilhem, A. and Yiangou, J. (2019), "A tale of two decades: the ECB's monetary policy at 20", *ECB Working Paper Series*, No 2346.

The measures achieved their goals. At their peak they lowered long-term interest rates by around 140 to 150 basis points.²⁴ ECB estimates imply that they accounted for more than a quarter of euro area growth between 2015 and 2019. Without them, around two and a half million fewer people would have been in work, and inflation would have fallen below zero in 2016.²⁵

The concern at the time was fiscal dominance. It was wrong in principle and in practice.

It was wrong in principle because the founders of the Treaty drew the line clearly: the central bank may not lend to governments, but it may buy and sell their securities in the market as a means of conducting monetary policy. What separates the two is the purpose.²⁶

With inflation far below target and falling, purchases of securities were essential to deliver on the mandate. This was an exercise of monetary dominance. If inflation is a monetary phenomenon, then responsibility for it rests with the central bank whether it is too high or too low. The ECB accepted that responsibility in full, as the founders intended.

The Court of Justice of the European Union took the same view. It ruled that the purchases fell within monetary policy and, given the safeguards attached to them, did not breach the prohibition on monetary financing.²⁷

The concern was also wrong in practice. The purchases did not pull the central bank into the orbit of fiscal policy. They *removed* the condition in which fiscal dominance takes root: a debt ratio rising by itself because r exceeds g , and with it the pressure to monetise.

By lowering borrowing costs and supporting growth, monetary policy helped reverse the differential between r and g , which averaged minus 1 percentage point between 2015 and 2019.²⁸ With deficits narrowing as the economy

²⁴ Lane, P.R. (2020), “The monetary policy toolbox: evidence from the euro area”, keynote speech at the 2020 US Monetary Policy Forum, New York, 21 February; combined effect of the measures, 2016–18. The effect of the APP alone on the ten-year term premium is estimated at around 95 basis points in Eser, F., Lemke, W., Nyholm, K., Radde, S. and Vladu, A.L. (2019), “Tracing the impact of the ECB’s asset purchase programme on the yield curve”, *ECB Working Paper Series*, No 2293.

²⁵ Lane (2020), *op. cit.*; Rostagno et al. (2019), *op. cit.* Growth share derived: a level effect on GDP of 2.5–3% by end-2019 against cumulative growth of 10.5% over 2015–19 (Eurostat).

²⁶ Committee for the Study of Economic and Monetary Union (1989), *Report on economic and monetary union in the European Community* (Delors Report); Article 123 TFEU; Article 18.1 of the Statute of the ESCB and of the ECB.

²⁷ CJEU, Case C-62/14, *Gauweiler*, 16 June 2015; CJEU, Case C-493/17, *Weiss*, 11 December 2018.

²⁸ ECB (2021), *op. cit.*

recovered, that was enough to lower the euro area debt ratio from 93% of GDP in 2014 to 84% in 2019.

Nor did the purchases tie the central bank's hands when inflation returned, as some had feared. In 2022, it raised rates at the fastest pace in its history, despite holding a large portfolio of bonds and incurring losses on it.²⁹

Independence, properly exercised, is what protected the construction and kept monetary and fiscal policy separate.

But a central bank carrying growth is not a durable arrangement, and today it no longer holds.

Today: global rates, local growth

Two forces are now at work that the central bank cannot, or should not, offset.

First, long-term interest rates in the euro area are rising, and increasingly for reasons outside Europe's control.

In recent months they have risen to their highest level in around fifteen years, moving in step with US Treasury yields. This is part of a longer shift. Long-term yields across advanced economies now move together far more closely than when the euro was designed.³⁰ And last year, global factors shaped the very long end of the euro area curve more than in any year of the past decade.³¹

The construction did not anticipate this. It assumed that governments which kept their own finances in order would be rewarded with lower borrowing costs. Budgetary discipline still matters, but it cannot insulate a government from changes in global interest rates. Now, even a government with sound finances cannot fully control what it pays to borrow.

Part of the rise in yields reflects inflation. Global supply shocks have pushed inflation up again, most recently through the rise in energy prices caused by the conflict with Iran and the loss of refining capacity in Russia and the Middle East.

²⁹ Lagarde, C. (2022), hearing at the Committee on Economic and Monetary Affairs of the European Parliament, Brussels, 28 November.

³⁰ Kim, D.H. and Ochoa, M. (2021), "International Yield Spillovers", *Finance and Economics Discussion Series*, 2021-001, Board of Governors of the Federal Reserve System. The correlation between monthly changes in US and other advanced economies' ten-year yields roughly doubled between the early 1990s and 2019.

³¹ Böninghausen, B. and Vladu, A.L. (2026), "Sloping up: the repricing of euro area yields in 2025", *The ECB Blog*, 16 January.

Because long-term yields reflect expected inflation over the life of a bond, higher inflation raises them directly.

The larger part reflects the supply of debt, above all from fiscal policy, which has become pro-cyclical in almost every major economy and most of all in the United States. This year the United States will run a deficit of close to 6% of GDP, and on current policies its debt will pass by 2030 its post-war record.³²

Private borrowing draws on the same pool of capital. The largest US technology firms alone are expected to invest close to \$800 billion this year, mostly in AI data centres, equivalent to around a sixth of total annual US business investment. Global data centre investment could pass \$3 trillion by 2030.³³ Much of it is financed with debt: AI-related bond issuance this year could reach around \$300 billion, equivalent to roughly a third of net new US corporate bonds.³⁴

Europe is adding to the supply of debt too, with Germany's fiscal expansion and a French deficit above 5% of GDP. This is unlikely to reverse. On existing policies, the IMF puts the extra spending Europe's advanced economies face from ageing, defence and the climate transition at about 4.5% of GDP by 2040. That is an increase roughly three times as fast as in the two decades before the pandemic.³⁵

With more long-term debt to hold, investors are demanding a higher premium to hold it.

In the 2010s, the central bank's purchases compressed the term premium, holding euro area long-term yields well below those in the United States. Today, with inflation above target, it can no longer do so. Instead, as it unwinds its earlier purchases, it is adding to the term premium, by a further 20 basis points in the euro area by the end of the decade.³⁶

Second, growth in the euro area has fallen behind the interest rate it now faces globally.

³² Congressional Budget Office (2026), *The Budget and Economic Outlook: 2026 to 2036*, February.

³³ De Vere, H., Ramaswamy, S. and Searls, S. (2026), "How AI debt financing impacts duration supply and interest rates", *Dallas Fed Economics*, 10 February; US Bureau of Economic Analysis, private nonresidential fixed investment, 2026 Q2; Dell'Oro Group (2026), "AI Buildout Maintains Momentum as Data Center Capex Surpasses \$3 Trillion by 2030, According to Dell'Oro Group", press release, 18 August (worldwide). Share derived.

³⁴ De Vere et al. (2026), op. cit. (gross AI-related investment-grade issuance); Barclays projection of net US corporate issuance of \$945 billion in 2026, as reported by Reuters, 15 January 2026. Share derived.

³⁵ IMF (2025), "How Can Europe Pay for Things That It Cannot Afford?", *Regional Economic Outlook Notes: Europe*, November. Pre-pandemic comparison: Eurostat, euro area primary expenditure, 2000–19; own calculations.

³⁶ Cipollone, P. (2025), "Striking the right balance: the ECB's balance sheet and its implications for monetary policy", speech, 18 February.

The immediate boost from higher deficits and AI investment is mostly being felt in the United States, which also stands to gain more from faster productivity growth if AI delivers. Europe imports the full rise in rates but only a fraction of the growth.

This gap is not yet visible in the interest bill. Debt issued in the low-rate decade still carries low coupons, so the average rate governments pay, around 2.25%, remains well below nominal growth of around 3.5%.³⁷

But every year around one-sixth of that debt is rolled over at today's rates, and the average rate is climbing with it. The Commission projects that, early in the next decade, the average interest rate on euro area debt will rise above the rate of growth.³⁸

On current trends, growth will not rise to close the gap. Year after year, the reforms meant to deliver growth have been left unfinished.

The single market in services has been a goal since 1985, yet over the past twenty years barriers to trade in services within Europe have fallen no faster than those facing firms from outside.³⁹

Capital markets union has been on the agenda for more than a decade, and since 2014 the frictions a saver faces when investing in equities in another euro area country have fallen by half as much as those for investing in the United States.⁴⁰

And productivity growth in the euro area has lagged far behind that of the United States. Since 1999, output per hour has grown at about half the US rate, and since 2019 growth rates have diverged further: 0.3% a year in the euro area against 1.8% in the United States.⁴¹

³⁷ European Commission (2026), "Debt Sustainability Monitor 2025", *European Economy Institutional Paper*, No 332. Implicit interest rate of 2.2% in 2025 and 2.3% in 2026; nominal growth derived from real growth and the GDP deflator.

³⁸ European Commission (2026), op. cit. Share of debt rolled over derived from debt maturing relative to the stock of debt.

³⁹ Bernasconi, C., Cordemans, N., Gunnella, V., Pongetti, G. and Quaglietti, L. (2025), "What is the untapped potential of the EU Single Market?", ECB, *Economic Bulletin*, Issue 8/2025.

⁴⁰ Anaya Longaric, P., Bellinghausen, L., Parisi, L., Quaglietti, L. and van Overbeek, F. (2026), "Assessing cross-border integration of equity markets in the euro area: evidence from a gravity model", ECB, *Economic Bulletin*, Issue 3/2026.

⁴¹ European Commission, AMECO database, real GDP per hour worked, whole economy, 1999–2025 and 2019–25; own calculations.

The need for growth, and what monetary policy can do

The IMF has recently set out what lies ahead for Europe on its current path.

If governments finance their higher spending needs without further consolidation or reforms, the average European debt ratio reaches 130% of GDP by 2040. Weighted by the size of economies, it reaches 155%.⁴²

Some fiscal consolidation over the medium term is unavoidable. But if this has to be done through spending cuts and tax rises alone, it is unlikely to deliver what is needed.

Over the past three decades, the typical consolidation in Europe delivered 3 to 4% of GDP in total. Weighting countries by the size of their economies, those that need to adjust would now have to improve their primary balances by around 6 to 7% of GDP, almost twice as much.⁴³ And even the smaller effort has never been politically easy.

Whether governments can deliver consolidation therefore depends on growth. Of the two forces that drive debt, the interest rate is increasingly set outside Europe. Growth is the one Europe can still move.

Half a percentage point of extra growth a year, sustained to 2040, with part of the extra revenue saved, would take Europe roughly a third of the way to a sustainable debt path. The remaining effort would then be close to what Europe has managed before.⁴⁴

Growth of that order is within reach. Fast AI adoption could add up to 0.4 percentage points to total factor productivity growth over the next decade⁴⁵, and domestic and single market reforms together could add roughly another half a percentage point a year.⁴⁶

⁴² IMF (2025), op. cit.

⁴³ Own calculations, calibrated to IMF (2025), op. cit., which reports simple averages, assuming no reforms and that each percentage point of cumulative consolidation over 2026–30 lowers the 2040 debt ratio by about 12.5 percentage points. The GDP-weighted figures assume a reference debt path of around 90–95% of GDP in 2040 and adjusting countries accounting for around 80% of GDP. The benchmark of 3 to 4% of GDP is based on the median consolidation episode, of about 1% of GDP a year for three to four years.

⁴⁴ Own calculations based on IMF (2025), op. cit. Assumes roughly half of the extra revenue is saved; the 2040 debt ratio is then about 20 percentage points of GDP lower, against a gap of around 63 points to the reference path. Without saving, the effect is about a third as large.

⁴⁵ Lane, P.R. (2026), “AI and the euro area economy”, keynote speech at the ECB-SAFE-RCEA International Conference on the Climate-Macro-Finance Interface, Frankfurt, 23 March. ECB staff estimates, faster-adoption scenario.

⁴⁶ IMF (2025), op. cit.: level gains of about 4¾% of GDP from domestic reforms and 3% from single market reforms by 2040. The annual growth effect of about ½ percentage point is derived by averaging over 2026–40.

Without that growth, debt ratios will keep rising by themselves, and the temptation will be to finance them through the central bank. History suggests that, faced with the choice between major budgetary tightening and monetary financing, governments have more often turned to the central bank than made the hard decisions themselves.

What, then, can monetary policy do?

The first priority is to control inflation.

In a phase of worsening debt dynamics, markets will start to test the central bank's commitment. If they come to doubt that price stability takes precedence over government financing, the inflation premium will return, borrowing costs will rise, and fiscal positions will worsen.

This cycle can feed on itself. Weaker public finances raise the expectation that debt will one day be monetised. That expectation raises inflation expectations, which raise borrowing costs again, which weaken public finances further. At the limit, the central bank would not be able to raise rates without adding to expectations of monetisation.⁴⁷

The second priority is to avoid making growth weaker than it needs to be. Faced with inflationary shocks, monetary policy cannot take responsibility for growth today, but it can ensure that the path of policy rates is no higher than stabilising medium-term inflation requires. This is consistent with putting price stability first.

The stakes are high, because growth is sensitive to the expected path of rates. Estimates suggest that the rise in expected short-term rates since the end of last year will reduce growth by between 1.1 and 1.3 percentage points in total over 2026-2028.⁴⁸ Those estimates predate the further rise in expected rates since mid-August.

The effects of monetary tightening can also outlast the tightening itself. Productivity growth is usually seen as the preserve of structural and fiscal policies, unaffected by monetary policy. But in both the United States and the euro area, roughly half of productivity growth since 1999 has come from capital deepening, which depends on the cost of capital. By weighing on investment and

⁴⁷ Sargent, T.J. and Wallace, N. (1981), "Some Unpleasant Monetarist Arithmetic", *Federal Reserve Bank of Minneapolis Quarterly Review*, 5(3); Brunner (1986), op. cit.; on the final point, Blanchard, O. (2004), "Fiscal Dominance and Inflation Targeting: Lessons from Brazil", *NBER Working Paper*, No 10389.

⁴⁸ Lane, P.R. (2026), "The Outlook for the Euro Area Economy", lecture at the University of Lausanne, 24 September. MMR model estimates.

innovation, restrictive policy may lower productivity and potential output for some time.⁴⁹ With potential growth at little more than 1%,⁵⁰ Europe has little margin for error.

When shocks are frequent and complex, getting the path of rates right is largely a matter of communication: markets have to understand how the central bank will react in each scenario.

The reason is that markets do not price a single path for interest rates. They price every path they think possible, weighted by its likelihood, and the rate path today reflects the average.

If markets know how the central bank will react, most of that weight sits on one path. If they do not, they have to allow for other reactions: for example, that when supply shocks hit, central banks simply raise rates in line with headline inflation. That possibility pulls the average up, and the expected path of rates can end up higher than price stability requires.

It is important, especially at a time when global factors play a larger role in driving yields higher in Europe, to ensure that the expected path of policy rates reflects the central bank's intentions, and not uncertainty about how it will respond.

The premium placed on communication today makes clear that the skill most required is the ability to explain.

A path to European renewal

The main driver of growth over the long run, the development and spread of new technology, is beyond any central bank's influence. Growth should become an explicit objective shared by all governments.

Europe's habitual response, with each country acting on its own, will not be enough in the world it now faces. National reforms still matter, but they cannot supply the scale on which technology, and so growth, now depends. Only integration can.

⁴⁹ Jordà, Ò., Singh, S.R. and Taylor, A.M. (2020), "The Long-Run Effects of Monetary Policy", *NBER Working Paper*, No 26666.

⁵⁰ European Commission (2026), op. cit.

Recent research shows what the absence of scale costs.⁵¹ Between 2008 and 2023, the difference between the value of American and European listed firms grew from around \$3 trillion to \$34 trillion. The gap is not the work of a few superstar firms or of differences in sectors. It is widest among young firms and in industries where returns to scale are highest.

The same research points to the cause. European firms still grow with their home economies: a 1% rise in a country's GDP is associated with a 0.8% rise in the sales of its firms, while the sales of American firms bear no relation to the size of their home state.

Supranational reforms have therefore become the lever that matters most for growth. A detailed plan for delivering these reforms has been laid out in the report on Europe's competitiveness, and much of it is now in the EU's joint roadmap.⁵² The first thing we must do is implement that roadmap.

That will also make it possible to finance the investment Europe needs in technology, clean energy and defence at a time of tight public finances.

Finishing the single market and capital markets union would raise the return on capital in Europe, which for large European firms is around a fifth lower than in the United States.⁵³ Together with a monetary policy that keeps rates no higher than needed, that would allow the private sector to carry a larger share of the investment.

More of Europe's high savings could then be invested at home, and more foreign savings attracted as investors look to diversify away from US assets. Last year, international debt issuance in euro reached its highest level since the single currency was introduced, and foreign portfolio inflows were close to historical highs.⁵⁴

Faster growth would in turn improve the balance between growth and interest rates, creating room for public investment without weakening debt

⁵¹ Becker, B., Benmelech, E. and Monteiro, J. (2026), "The Value Gap: Europe Cannot Scale", *NBER Working Paper*, No 35577.

⁵² Draghi, M. (2024), *The future of European competitiveness*, European Commission, September; European Parliament, Council and European Commission (2026), *One Europe, One Market Roadmap*, joint declaration, 24 April.

⁵³ McKinsey Global Institute (2024), *Investment: Taking the pulse of European competitiveness*, June. Return on invested capital of public companies with revenue above \$1 billion in 2022, weighted average for 2015–22.

⁵⁴ ECB (2026), *The international role of the euro*, June.

sustainability. And fiscal space would be further enhanced if that investment were allocated to the level, national or European, where it is most efficient.

AI is one of the clearest examples today. Secure access to computing capacity benefits all Europeans, yet it is undersupplied when each country acts alone. The EU hosts less than 5% of the world's AI computing capacity. A recent study estimates that raising this share to 15% by 2030, roughly in line with the EU's weight in the world economy, would require around €1.3 trillion of investment.⁵⁵

The public sector share necessary to de-risk this investment, estimated at around €100 billion, is a prime candidate to be financed through the EU budget. Even the full amount would take only around 5% of the next budget, now under negotiation, and would spare national budgets while they are being consolidated.⁵⁶ That sum is well within reach.

Brunner's condition still holds: a central bank can keep money stable only if governments keep their debt under control.⁵⁷ What has changed is how that condition can be met. A fiscal framework cannot meet it alone when growth is weak.

The further integration goes, the more firmly growth can stay above interest rates, and the better insulated the central bank will be from political pressure. Growth and independence then reinforce each other.

A generation ago, Europe gave itself a monetary constitution that has held through every crisis since. It rests on an independent central bank with a clear priority for price stability, and on budgetary discipline. That framework remains the right one.

But for the constitution to endure, legislators at national and European level must now take full responsibility for growth as an objective of the Union. If they do, they will set Europe on course to renew itself.

⁵⁵ Schnitzer, M. (convenor) et al. (2026), *A Transformative AI Strategy for Europe*, Senior Expert Council, September.

⁵⁶ Schnitzer et al. (2026), op. cit., where the €100 billion is a contribution from the EU and Member States. Budget share based on European Commission (2025), *A dynamic EU budget for the priorities of the future – The Multiannual Financial Framework 2028–2034*, COM(2025) 570, 16 July (€1.98 trillion in current prices), and the Cyprus Presidency's negotiating box with figures, 11 June 2026 (€1.95 trillion). Share derived.

⁵⁷ Brunner (1986), op. cit.