Ladies and Gentlemen,

It is a great honour to give this year’s Martin Feldstein lecture.
I am very grateful to Jim Poterba and to the NBER for the invitation.
The NBER is a cornerstone of economic thinking worldwide.
Since its foundation over a century ago, NBER members have pushed the boundary of academic research to an extent that was simply unimaginable at that time.
You have also guided the work of policymakers and contributed to making the world a better place.
I am personally very grateful for the research you have produced during my time in government and central banks.
It has prevented mistakes, strengthened our convictions, and made our policies much more effective.

I would also like to pay tribute to the late Marty Feldstein.
He was a towering figure throughout my career – in fact, it was thanks to an invitation from him that I attended the first Summer Institute back in 1978.
Since then, he went on to influence academia and policymaking to an extent that few other economists can equal.
His work on tax policy, public economics and savings behaviour has transformed the way we think about entire areas of research. This is because Marty’s research always combined insightful ideas with robust empirical evidence and policy relevance.
As the chairman of the Council of Economic Advisers to President Ronald Reagan, he spearheaded a paradigm shift in the relationship between governments and markets, not just in the US but worldwide.
At the NBER, his stewardship has contributed to transforming this institution into the intellectual powerhouse it is today.
And he did all of this, while continuing to care deeply for undergraduate and graduate students, mentoring many generations of economists.
In the economics profession, it is hard to think of someone who – in one way or another – does not owe a debt of gratitude to Marty.

My lecture today will focus on a topic which was very close to Marty’s heart, which is the creation of the European Monetary Union and its future – of which Marty was extremely sceptical.

The fundamental macroeconomic challenge of forming a monetary union was laid out by Robert Mundell in 1961 and centred on the management of asymmetric shocks. Countries joining a common currency would relinquish the ability to set their own monetary policy and to use the exchange rate as an instrument of stabilisation.

As monetary policy and exchange rate policy would be allocated to the management of common shocks, other adjustment mechanisms would be needed to address asymmetric shocks and prevent them from triggering prolonged regional slumps.

Mundell identified those adjustment mechanisms as fiscal transfers and labour and capital mobility, which could stabilise demand ex post in depressed regions. In the later literature, the crucial role of risk sharing via capital market integration was also recognised, which would limit the size of local shocks ex ante.¹

The euro however went ahead with few of these conditions in place. Fiscal transfers among member states in form of assuming each other’s debts were outlawed in the Maastricht treaty – reflecting a philosophy where countries should “keep their own house in order” and not rely on the largesse of others.

Regional adjustment through labour mobility was underdeveloped, with studies at the time finding that the majority of employment shocks were absorbed through changes in the participation rate rather than migration.² And there was no serious attempt to integrate European financial markets, beyond soft regulatory alignment.

So why did they do it? Viewed from this side of the Atlantic, the reasons were often incomprehensible. Many economists warned that the European monetary union was doomed to fail, that the elites had cheated their people, and that the consequences would be stark – condemning the EU both as an economic and a political project.

As Marty Feldstein warned in a famous 1997 article for Foreign Affairs, “if EMU does come into existence, as now seems increasingly likely, it will change the political character of Europe in ways that could lead to conflicts in Europe”.

But there was always another perspective, which was that the euro was the consequence of decades of past integration – notably the evolution of Europe’s single market – and that it was only one more step along a much longer road towards political union.

And through the so-called “functionalist” logic of integration, where one step forward leads inexorably to the next as its shortcomings are revealed, the end-goal of political union would drive the necessary macroeconomic changes.

From this viewpoint, the key question was not whether the euro area was an optimal currency area from the start – evidently it was not – but whether European countries were prepared to make it converge towards one over time.

The immediate aftermath of the creation of the euro, however, added to the doubts of the sceptics. And it is easy to see why many did not view this political narrative as credible, especially once the euro was launched and the next steps in political union began to unfold.

When given the chance to demonstrate their commitment to political union in the form of a European constitution, Europeans rejected it. And the EU then elected to enlarge to Eastern Europe in the mid-2000s without reforming its decision-making rules – arguably weakening rather than strengthening its political nature.

But having taken part in the negotiations for monetary union in the early 1990s, as head of the Italian treasury, I can attest that this political motivation was real.

The goal of building an ever-closer European Union ran very deep, born out of the ashes of the World War Two and conceived above all to avoid conflict in Europe. And the single currency was seen as a fundamental step towards that goal.

From a political standpoint, the priority was therefore to seize the historical moment not to wait until every necessary condition was in place. And there was a genuine belief that the core commitment to European unity would create the political will to address any design flaws that were uncovered along the way.

So, we moved forward, sidestepping our contradictions and knowing that there were serious economic concerns – especially the lack of fiscal transfers and the very different starting conditions across member states in terms of public debt levels.

Success would depend on three conditions being met.

First, national fiscal stabilisers would have to be able to operate freely, which – given the size of national budgets in Europe – could provide substantial stabilisation of local
shocks. Estimates at the time suggested that national budgets could provide as much stabilisation of asymmetric shocks as the US federal budget.34

Second, the political commitment to the euro would have to create implicit transfers in place of explicit ones – via fiscally weaker countries “borrowing” the credibility of fiscally stronger ones and enjoying lower financing costs. That would allow governments to implement stabilisation policies without threatening their market access.

Third, fiscal rules would have to be designed and applied in such a way as to anchor confidence in the medium-term soundness of public finances, so that counter-cyclical expansions would not engender fundamental questions of solvency. In that way, the promises that underlay those implicit transfers would never have to be tested.

For the first decade of the euro, the first two of these conditions broadly held.

Markets viewed euro area sovereign issuers as essentially interchangeable, with spreads on Italian bonds converging to within a few basis points of German ones. And national fiscal stabilisers were able to operate relatively freely when faced with moderate shocks, such after 9/11 and the dotcom bust.

But the third condition failed. Europe’s fiscal rules were built around deficit limits – with a ceiling of 3% of GDP – which created an in-built pro-cyclicality.

Whenever a country grew quickly, it would see revenue windfalls which made the deficit ceiling look slack, leading in turn to rising spending commitments and higher structural deficits. But if the cycle turned sharply, those revenues would evaporate while the structural commitments remained, rapidly reducing fiscal space.

As a result, when faced with a very large shock after the Lehman bust, deficits ballooned and public debts were pushed closer to levels that could not be sustained by implicit transfers alone. The constructive ambiguity of the common commitment to the euro had to be filled out by detailed plans for what would happen in extremis.

Governments initially responded as the “functionalists” had hoped, by expanding the euro area’s policy framework to allow limited transfers in the form of IMF-style financial assistance. And they did so successfully, launching the first Greek bailout and a common European financing mechanism.

But then EU leaders announced in late 2010 that future bailouts would be subject to sovereign debt restructuring: the so-called “Deauville agreement”. In an instant, this cut off implicit transfers and injected credit risk into all European sovereign bonds.

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4 Later estimates find that 49% of an unemployment shock is absorbed by the automatic stabilisers in the euro area, whereas the figure for the US is 32%. See Dolls, M., Fuest, C., Kock, J., Peichl, A., Wehrhöfer, N. and Wittneben, C. (2015), “Automatic Stabilizers in the Eurozone: Analysis of their Effectiveness at the Member State and Euro Area Level and in International Comparison”, Centre for European Economic Research, Mannheim.
It left us with two stark choices.

The first was to accept widespread sovereign failures in order to “reset” the union at lower debt levels, thereby preserving the principle that fiscally stronger states should not pay for weaker ones. But precisely because initial debt levels were so high, and holdings of sovereign paper were concentrated within the euro area banking system, defaults could not remain contained events except for very limited cases.

Fearing principal losses and – at worst – redenomination into lower-value currencies, investors sold off the public debt of any country perceived to be vulnerable, triggering a vicious circle of worsening bank balance sheets, tightening credit conditions and tumbling growth – and ultimately deep financial fragmentation.

By 2012, spreads vis-à-vis German ten-year government bonds reached 500 basis points in Italy and 600 basis points in Spain, with even wider spreads in Greece, Portugal and Ireland. As those economies represented a third of euro area GDP, it was unthinkable that the rest of the union would not be pulled under without a change of tack.

The second option was therefore to make transfers more explicit, which is what Europe ultimately did – if in a suboptimal way.

It expanded its common financing mechanism, which increased risk-sharing through cross-border lending within the Union. Recent literature finds that pre-sovereign debt crisis, only around 40% of country-specific shocks in the euro area were absorbed, whereas once this official assistance was in place around 60% were smoothed out.5

This lending in turn facilitated a form of fiscal transfers. It allowed Greek debt to be restructured, transferring resources from private bondholders to public creditors. And those public creditors then extended their loans decades into the future at very low fixed interest rates, which will lead over time to a large intertemporal transfer to Greece and other countries that received financial assistance.

This response again inched the euro area closer to an optimal currency area. But the transfers still fell some way short of the model that Mundell had imagined.

The key problem was that their stabilising effect was undermined in the countries receiving them by the strict terms of the accompanying adjustment programmes. And at the same time, Europe’s procyclical fiscal rules compounded the weakness in demand by inducing an aggregate fiscal contraction into a recessionary shock.

As countries strived to stay on the right side of the deficit limits, the euro area fiscal stance tightened by around 4 percentage points of potential GDP from 2011 to 2013 – even in countries that had ample fiscal space and suffered no market pressure, thereby reducing demand for exports from countries without fiscal space.

The difficult road towards building a complete monetary union was illustrated by the diverging responses in Europe to these developments. In Greece and other countries, years of austerity fuelled rising populism. But in Germany, Euroscepticism also rose as new parties appeared opposing bailouts and the perceived laxity of their terms.

And a few years later, once monetary policy turned strongly accommodative in part to offset the disinflationary effects of fiscal tightening, the Finance Minister of Germany claimed that it was 50% responsible for the rise of Eurosceptic parties in his country.

For all these problems, however, the euro survived.

Governments of all colours and from all countries continued to stand behind the project, preferring to keep even the weakest member states on board.

This strong political commitment was essential when the European Central Bank announced in 2012 that it would be within its mandate to do “whatever it takes” to save the euro – a decision sanctioned by the European Court of Justice three years later.

And investors stopped betting against the dissolution of the common currency, since they knew that Europe’s decision-makers would never allow it to happen.

There is still no agreement today in the euro area around a central budget for stabilisation purposes or cross-border fiscal transfers. And this begs the question of whether the currency area can ever be truly stable without further integration in this domain.

There is no doubt that it would be a desirable end-goal to have a central fiscal capacity for stabilisation purposes, as regions will always be exposed to asymmetric shocks. But three factors suggest that it may no longer be a sine qua non condition.

First, over time, the euro area has gradually converged closer to the other ideal conditions that Mundell laid out, somewhat mitigating the need for fiscal transfers.

25 years of economic integration have led to more integrated supply chains and more synchronised business cycles, making the single monetary policy more appropriate for all countries. Multiple studies find that business cycle synchronisation in the euro area has risen since 1999 and the euro can explain at least half of the overall increase.6

At the same time, while labour mobility in the euro area remains some way short of US levels, studies have found a gradual convergence, reflecting both a fall in interstate migration in the US and a rise in the role of migration in Europe.7

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And channels of risk-sharing have improved further. For example, against the backdrop of banking sector integration – the so-called banking union – and generous official assistance, cross-border lending was notably more resilient during the pandemic than we had seen during previous large shocks.8

The further Europe can advance along this path – especially in terms of integrating its capital markets – the lower the need for permanent fiscal transfers will be.

Second, the ability of national fiscal policies to stabilise the cycle has been bolstered by changing reaction function of the central bank.

Since 2012, the ECB has identified unwarranted increases in sovereign spreads as a fundamental impediment to the smooth transmission of monetary policy – and repeatedly acted when transmission was at threat.

That reaction function has placed an effective floor under sovereign bond markets in cases where spreads are not fundamentally driven – a floor that has proven to be effective even when the stance of monetary and fiscal policy has not been aligned.

For example, euro area governments were able to undertake a sizeable fiscal stimulus to offset the effects of the energy crisis last winter, even as policy rates were rising steeply and the economy was stalling – with the euro area transferring more than 200 billion euro to the rest of the world in the form of a terms of trade tax.

This would likely have been impossible a decade prior, when even small rate increases proved destabilising. It suggests that something has fundamentally changed in how investors view the euro area and the leeway that they are prepared to provide.

Third, the nature of the shocks we are facing is changing.

With the pandemic, the energy crisis and the war in Ukraine, we are increasingly confronting common, imported shocks rather than asymmetric, self-inflicted ones. This shifts the problem from supporting struggling states towards addressing shared challenges – and so creates a different alignment of political preferences.

As the episode I described earlier illustrated, cyclical risk-sharing is hard to implement in Europe because political preferences are severely misaligned. But for shared goals such as health, defence and the climate transition, policy preferences are overlapping and the need for higher spending commitments is incontrovertible.

The European response to pandemic acknowledged this new reality.

It forced Europe to centralise important areas of health policy, as the Commission proved a more effective buyer of vaccines than individual states could be. The restrictions which were necessary to slow the spread of the virus also led to the creation of a joint fund to support labour markets across the euro area (“SURE”).

Ultimately, Europe agreed on the creation of a 750 billion euro fund (“Next Generation EU”) to support countries in addressing the green and digital transitions, which demand much greater investment than individual countries alone can afford.

And so, if the degree of convergence within the euro area is higher, the frequency of asymmetric shocks is lower, and common funding of shared goals increases, the rarer will become the instances when a fiscal capacity is really needed.

The key question now is whether Europe can continue this transition from cyclical to structural fiscal policy – and thereby open up a different, perhaps more historically-founded, road towards fiscal union.

History tells us that common budgets have rarely been created as an adjunct to monetary integration, but rather to deliver specific goals in the public interest.

In the US, it was the war of independence that delivered the “Hamiltonian moment” of debt assumption by the federal government. In Canada and Germany, the first direct federal taxes – aside from customs duties – were created to generate new revenues to fund the First World War. It was the need to overcome the Great Depression that led to the expansion of the US federal budget in the 1930s.

Similarly, in Europe today we have never faced so many shared supranational goals, by which I mean goals that cannot be managed by countries acting alone. We are undergoing a series of major transitions which will require vast common investments.

The European Commission puts the investment needs for the green transition at more than 600 billion euro annually until 2030 – and between a quarter and a fifth of this will have to be funded by the public sector.

We are also facing a geopolitical transition, driven by US-China decoupling, in which we can no longer rely on unfriendly countries for critical supplies. That will require a substantial reorientation of investment towards building capacity at home.

And never in the history of the EU have its founding values of peace, democracy and freedom been challenged as much as they are by the war in Ukraine. One immediate consequence is that we must make a transition towards much stronger common European defense if we are, at a minimum, to meet the NATO military expenditure target of 2% of GDP.

But as it stands, Europe’s institutional construct is not well suited to carry out these transitions – as a comparison with the US reveals.

Here, we are seeing a new focus on so-called “statecraft”, where federal spending, regulatory changes and tax incentives align to pursue US strategic goals. The Inflation

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Reduction Act, for example, will simultaneously accelerate green spending, attract foreign investment and restructure supply chains in America’s favour.

But Europe lacks an equivalent strategy to integrate EU-level spending, state aid rules and national fiscal plans – as the example of climate change shows.

Once Next Generation EU expires, there is no proposal for a federal instrument to replace it to carry out the necessary climate-related spending. EU state aid rules limit the ability of national authorities to actively pursue green industrial policy. And we have no carve outs in our fiscal rules to enable sufficient long-term investment.

Without action, there is a serious risk that we under-deliver on our climate goals, and likely lose our industrial base to regions that impose fewer constraints on themselves.

This leaves us two options.

First, we can ease state aid rules and relax fiscal rules, allowing member states to take on the burden of investment spending in full. But in the process, we will create fragmentation as – even with the greater leeway that markets are allowing the euro area today – countries with more fiscal space will have much more room to spend than others.

As we learned from the Deauville agreement, fragmentation makes no sense when there is a supranational objective that countries cannot achieve on their own. Just as the euro cannot be stable if large parts of the monetary union are failing, climate change cannot be solved by Germany reducing its carbon emissions faster than Italy.

So, this means that the only option that allows us to achieve our goals is the second one: to take this opportunity to redefine the EU, its fiscal framework and its decision-making process, and make them commensurate with the challenges we face.

And it so happens that the fiscal rules are currently up for discussion, while – with further enlargement on the table – the time to reflect on decision-making rules is apt.

The core challenge for the euro area is that we are relying on fiscal rules at the national level to deliver multiple different goals.

Given the crucial stabilising role of national budgets, we need rules that allow counter-cyclical policy to respond to local shocks. We also need rules that facilitate the massive investment needs we require. And we need to ensure the medium-term credibility of national fiscal policies in a context of very high post-pandemic debt levels.

But there is an inherent trade-off between these goals.

Ensuring fiscal credibility requires rules to be more automatic and contain less discretion. But since no rule can be tailored to all future contingencies, more
automaticity will always constrain the ability of governments to react to unforeseen shocks.

Likewise, credible rules require adjustments over not-to-long time horizons. But the kind of investments we need today imply long-term spending commitments – many of which will extend beyond the lifetime of the governments who are making them.

The European Commission has attempted to resolve these trade-offs by proposing to focus on an expenditure rule which is linked to a country’s medium-term debt trajectory.

This would certainly be an improvement on the previous deficit caps, as expenditure rules accommodate revenue windfalls during upswings, thereby enabling the countercyclical, stabilising role of fiscal policy when the cycle turns.11

The expenditure path can also be adjusted for countries undertaking investments by lengthening the period until the debt trajectory needs to start declining. But all this will inevitably come at the price of automaticity and, perhaps, enforceability.

So, if we look further ahead, we need to acknowledge that truly credible fiscal rules cannot work without an equivalent re-thinking of where fiscal powers should reside. As automatic rules represent a devolution of powers to the centre, they can only work if they are matched by a greater degree of spending from centre.

This is broadly what we see in the US, where the devolution of powers to the federal government makes possible broadly inflexible fiscal rules for the states. Balanced budgets at the state level are credible precisely because of fiscal transfers and federal spending on common projects, which can address unforeseen shocks and fund shared goals.

The euro area will probably never replicate this structure in full, given the greater role of national budgets in macroeconomic stabilisation. But there are good reasons why importing some elements would make sense.

First, if we were to carve out and federalise some of the investment spending that is needed for shared goals, it would make use of our fiscal space more efficiently.

Europe’s asymmetric fiscal space – with some able to spend much more than others – is fundamentally wasteful when it comes to shared goals like climate and defense. If some countries can spend freely on these goals but others cannot, then the multiplier of all spending is lower, since none are able to achieve climate or military security.

Second, issuing more common debt to finance this investment would potentially enlarge the collective fiscal space we have available.

The borrowing costs of the EU are lower than the weighted average borrowing costs of its member states, and they are almost identical to those of the financing

mechanism set up during the crisis, the ESM – despite the latter sitting on so much paid-in capital that it could repurchase 70% of its bonds at nominal value.

This suggests that investors put significant faith in the capacity of the EU to extract from each participating country the future stream of revenue necessary to service the underlying debt. And that in turn implies an untapped potential for the EU to intermediate debt and lower aggregate borrowing costs in the Union.

But elevating more tasks to the federal level would require trust between member states in the ability and integrity to spend joint funds by national authorities – as much of the implementation would still take place at the national level.

And it would require a commensurate change in our fiscal rules in the direction of less flexibility.

Issuing more EU debt would, everything else equal, reduce the fiscal capacity to service national debt. And that means, at a minimum, we would need to ensure that high-debt member states use the fiscal space created by common spending to improve their fiscal outlook – a part of which should come through positive growth effects.

For now, there are limits to how far we can go in this direction, not least because the borrowing cost of the Union is still above that of its strongest members – meaning more common borrowing may be seen as a form of unsanctioned fiscal transfer.

And so, one possibility is to proceed – as we have up to now – with technocratic, “functionalist” integration, making apparently technical changes and hoping that political ones will follow. This approach succeeded eventually with the euro, and it has ultimately made the EU stronger. But the costs have been high and progress has been slow.

The other possibility is to proceed with a genuine political process, where the ultimate goal is explicit from the outset and endorsed by voters in the form of an EU Treaty change. This route failed in the mid-2000s and policymakers have shied from it since, but I believe that now there is more hope of movement.

As the EU enlarges further to include the Balkans and Ukraine, it will be essential to reopen the Treaties to ensure that we do not repeat the mistakes of the past by expanding our periphery without strengthening the centre. And this should produce a natural alignment between our shared goals, collective decision making and fiscal rules.

The starting point of any future Treaty change must be the acknowledgement of the increasing number of shared goals and the need to finance them together, which in turn necessitates a different form of representation and centralised decision-making. Then, a move towards more automatic rules would become more realistic.

I believe that Europeans are more ready than twenty years ago to take this route, because today they only really have three options: paralysis, exit or integration.
The polls are clear that citizens feel an increasing sense of external threat, not least since the Russian invasion, which makes paralysis increasingly unattractive.

The case for exit has moved from theory to reality with Brexit and whether there are net benefits remains highly uncertain.

And so, the relative costs of further integration are now lower.

Whichever route we take, we cannot stand still or – like a bicycle – we will fall over.

The strategies that had insured our prosperity and security in the past – reliance on the USA for security, on China for exports and on Russia for energy – are either insufficient, uncertain or unacceptable. The challenges of climate change and migration only add to the sense of urgency to enhance Europe’s capacity to act.

We will not be able to build that capacity without reviewing Europe’s fiscal framework, and I have tried to outline the directions this change might take.

But ultimately the war in Ukraine has redefined our Union more profoundly – not only in its membership, and not only in its shared goals, but also in the awareness it has created that our future is entirely in our hands – and in our unity.