In a few weeks, I will come to the end of my term as President of the European Central Bank. Such occasions provide an opportunity to look beyond the cut and thrust of current events and to reflect on the past, trusting that the experiences we have had and the lessons we have learned, may be useful for others.

In this vein, I will not focus strictly on monetary policy or the business of central banking, but I would like instead to share my thoughts on the nature of policy responsibility. In various roles, I have had the privilege of having a policy mandate conferred upon me by elected politicians: here in Italy, at the Treasury and the Banca d’Italia; at the European level, at the ECB and as President of the European Financial Committee; and at the global level, as Chair of the Financial Stability Board.

I have had the good fortune to work with exceptional central bankers, public officials and political figures, people whose example I have learned from and to whom I owe a debt of gratitude. In turn, I hope that some of the lessons I have learned along the way may also be of benefit to the next generation of public servants.

Many students from this university, and from other places of learning, will at some point in their lives take up the mantle of public service. Society depends on its best young minds to devote their energies in the public interest.

Today, I would like to focus on three qualities that often appear to inform what we think of as good decision-making: knowledge, courage and humility.

Of course, these qualities do not guarantee that the right decision will always be made. Policymakers often take decisions in an environment of uncertainty, where outcomes are rarely known and cannot easily be anticipated. But as former United States Secretary of the Treasury, Robert Rubin, observed a few years ago, “almost all significant issues are enormously complex […] the very nature of reality is complexity and ambiguity”.

Knowledge

Since policymakers face substantial uncertainty, they should strive to base their decisions on expert knowledge. This is crucial for acquiring a deep understanding of a subject, making informed decisions in a way that distinguishes the technical from the political and adjusting those decisions in the light of new evidence. Policymakers can never benefit from the same degree of empiricism as scientists, but they can employ the same approach of examining the evidence and testing hypotheses in order to better meet the demands that people place on government.

Today, however, we are living in a world where the salience of knowledge in policymaking is being challenged. Trust in objective facts, born of research and provided by impartial sources, is diminishing, to be replaced by subjectivity and the fragmentation of opinions into echo chambers.

In this setting, it would be easy for policymakers to mirror what they believe to be the public mood: to turn away from expertise and adopt more partial perspectives, and to follow instinct rather than reason. But this does not typically serve the public interest.

History teaches us that when decisions are intended to have a lasting and positive impact, they are based on thorough research, accurately established facts and long experience. To give just
one example, the creation of the Bretton Woods system – which stabilised the global economy after the war, served it well for decades and established the financial institutions that today are so critical for managing the consequences of globalisation – would not have been possible without the painstaking empirical analysis conducted during the war by the great economist Ragnar Nurksæ or the experience and vision of John Maynard Keynes.

Expertise is indispensable in that it allows us to grasp the complexity of our economies and societies; it allows us to quantify the risks associated with a particular set of circumstances, and thus judge the imperative to act; and it allows us to calculate the trade-offs and distributional effects of a particular action, and thus determine who benefits and who is adversely affected.

I believe this is important in every area of policy, but a particularly strong example is climate change. It is only through the expertise of climate scientists that we can understand the range of scenarios we face and the potential feedback loops between ecosystems; that we can quantify the tail risks and costs of inaction, as the late economist Martin Weitzman so brilliantly showed; and that we can predict which regions and industries will be most affected (such as farmers in Italy and many other countries, who could be exposed to weather events that are increasingly difficult to cope with).

Not unlike the ecological crisis, the euro area crisis has uncovered multiple feedback loops that were previously not well understood, for instance between sovereigns, banks and firms. It has challenged our understanding of key relationships in the economy, such as between unemployment and inflation. The ECB’s assessment has always relied on accurate research and analysis by economists and statisticians. On several occasions, this approach has been essential for accurately framing the problem and providing the coordinates for an effective response.

One example of this was the unprecedented policy package, including negative interest rates and purchases of government bonds, that the ECB adopted from 2014 to 2015 to prevent the euro area’s imminent slide into deflation. At that time, many policymakers, myself included, had questions about how this would work in the euro area. Interest rates had never gone below zero in a major economy, and we did not know how purchasing government bonds would play out in our bank-based economy. These measures represented uncharted waters in which, by definition, the effects of our actions could not be known with certainty.

Nevertheless, these decisions were guided by the evidence available to us, and by an assessment of the overall balance of risks and the options available to respond to them. The evidence at that time pointed in one direction: without new unconventional measures, the ECB would not be able to fulfil its price stability mandate. Analysis suggested that the effective bound on interest rates was lower than previously thought and that sovereign purchases could have a substantial impact \textit{via banks}, because they would reduce financing costs for banks, and encourage them to lend to the real economy rather than invest in sovereign bonds.

The latest estimates bear this out. The policy package is found to have had a substantial impact, contributing 2.7 percentage points to euro area real GDP growth between 2015 and 2018 and 1.3 percentage points to inflation. At least one-fifth of the overall impact on growth in the year that it peaked – 2017 – is attributable to negative rates, with asset purchases accounting for most of the remainder.

Our assessment of these measures also included possible side effects. All monetary policies have side effects, even in normal times, and impact on some groups more than others. But as the central bank for the euro area as a whole, the ECB is tasked with looking at the overall picture: whether the benefits of the policy measures taken, in net terms, outweigh the potential costs.
The data suggested, and continue to suggest, that this is the case – a conclusion shared by the central banking community globally, as a recent report from the Bank for International Settlements shows. However, as with all evidence-based policymaking, conclusions must be continuously reviewed and updated as necessary.

It was with this in mind that the ECB recently made adjustments to negative rates, introducing tiering for excess reserves. On another occasion, a detailed evidence-based analysis showed that concerns that unconventional policies worsen inequality were unfounded, and this strengthened the ECB’s resolve to pursue its policy path.

This is not to say that experts – the ECB included – have perfect knowledge. Theories can have blind spots and forecasts can be proven wrong. The crisis revealed that the conviction then prevailing among economists that financial markets could largely self-regulate was misplaced. Indeed, as Robert Shiller has explained, both the public and experts can fall victim to "narrative epidemics" which can have an adverse impact on the economy.

The answer to this, however, is not to reject the value of knowledge. It is for those with expert knowledge to continuously re-examine the evidence, scrutinise their prior assumptions and listen to dissenting voices. Policymakers depend on dissent to hold a mirror up to their actions and to break the power of dominant narratives. This is vital to the advancement of knowledge and is the foundation of all scientific progress.

For those tasked with making decisions, nothing can replace rigorous analysis accompanied by experience.

**Courage**

Knowledge can only go so far, however. Once the facts have been established as best they can, then comes the decision to act. And in economic policy, as with other policy, all actions have side effects and unintended consequences. There are situations in which even the best analysis does not provide enough certainty to render making a decision easy; it is often tempting not to make a decision at all. But this is precisely the point at which policymakers must draw on the second quality: courage.

For inaction is also a decision. When the effect of inaction would be to compromise the mandate conferred on the policymaker by the legislator, the decision not to act is a decision to fail. There are many instances when policymakers are compelled to act knowing that the consequences of their decisions are uncertain. But they do so in the confidence that doing nothing would lead to an outcome considerably worse and cause them to betray their mandate.

Over the past decade of crisis, the need to take decisions, even critical ones, often faced three hurdles: fear that not all potential complications had been considered, opposition from vested interests and doubts about the legitimacy to act.

Inaction based on fear of complications is rooted in the belief that there is no need to change existing arrangements, even when all evidence and analysis point to the need to act. But this complacency is motivated by arguments that often find no support in reality.

The setting-up of the European Stability Mechanism (ESM), the launch of European banking supervision, the creation of the Single Resolution Fund – all faced opposition on grounds of concerns regarding moral hazard or the appropriate allocation to the European level of competencies previously performed at national levels. In retrospect, euro area governments did not lack courage and they took the key steps at crucial moments. Our monetary union is stronger today as a result, and most of the predicted complications did not come to pass.

However, the main point here is not that these decisions were validated in hindsight, but that,
once the need to take action had been substantiated and justified, the courage was found to take
decisions, without hesitation, for the benefit of Economic and Monetary Union.

The second hurdle that policymakers have often faced when implementing reforms is the
opposition from vested interests. In particular, it was clear at the onset of the crisis that several
governments needed to enact structural reforms to improve growth prospects and lower
unemployment. But structural reforms always create winners and losers, and governments met
inevitable resistance from those set to lose out.

These governments, however, were able to separate vested interests from the public interest,
recognising that many more stood to gain from action – and the benefits are now largely there to
see. Focusing on the labour market alone, there is evidence that countries that implemented
reforms directly after the crisis have seen both cyclical and structural unemployment go
down. These reforms have also made employment growth more responsive to GDP growth,
which has contributed to the 11 million increase in jobs that we have seen in the euro area since
mid-2013 as the economy has recovered.9

The third hurdle concerns doubts about the legitimacy to act. This is something that the ECB has
faced with several of its unconventional policies, not least its Outright Monetary Transactions
(OMT) programme that was launched in the summer of 2012. Initially, there was considerable
opposition to OMT in some quarters on the grounds that it was not the central bank’s job to
stabilise the euro area, but rather that of politicians, and that doing so would cross the line into
fiscal policy.

On the one hand, there was a concern that a commitment to unlimited bond purchases could
cross the dividing line between monetary policy and other policies. However, this was more a
question of design than of principle. What was needed was to create safeguards and limits to
contain such risks, which we achieved with, among other things, the requirement for an ESM
programme to guarantee sound economic policies. The European Court of Justice has since
confirmed that the design of OMT was fully in line with the ECB’s mandate.

Set against this was the material risk – had we failed to act decisively – of a catastrophic
unravelling of the euro area with severe deflationary consequences. By July 2012 spreads vis-à-
vis German ten-year government bonds had reached 5% in Italy and 6% in Spain, with even
wider spreads in Greece, Portugal and Ireland. The cost of deflation protection had risen from
184 basis points in January 2012 to 276 basis points in July.

So, what gave us the courage to act was the conviction that there was a far greater risk if we did
nothing. Inaction would have meant nothing less than the failure of our mandate and, potentially,
of the currency we had been tasked with preserving. This reality made the course taken
inescapable – meaning it was the only viable option for any responsible policymaker.

While OMT was never activated, the effect of our commitment to do what was necessary to
preserve the euro was profound, and equivalent to that of a large-scale asset purchase
programme: spreads in vulnerable countries fell on average by more than 4% over the next two
years. The macroeconomic impact of OMT was also analogous to purchase programmes
carried out in other countries. In fact, ECB research finds that the GDP and price effects of OMT
were broadly in line with those estimated for the quantitative easing that took place in the United
States and the United Kingdom.10

Humility

The third quality, humility, comes from the recognition that the power and responsibility held by
public servants are not boundless, but are derived from the mandate conferred on them which
provides the guidance for decision-making and sets the limits of action.
Public servants, and central bankers in particular, have a political mandate, in that the mandate is bestowed on them through a political process. ECB Board members are appointed by the Chamber of States – the EU Council – and a view is expressed on those appointments by representatives of the people: the European Parliament. They are bound by an objective – price stability – which in Europe has constitutional value: it is enshrined in the Treaty. Elsewhere this is embedded in law, but in each case it emanates from a democratic process. And they are fully accountable to parliaments.

This political mandate is essential for central bank independence to be compatible with democracy. Central banks are powerful, independent and unelected, and this combination can only be squared if they have a clearly defined mandate which is conferred by elected representatives and for which they are held accountable by the public. For our part, the ECB President is called on to testify every three months before the European Parliament, which in my case came to a total of forty meetings in eight years, and I have also appeared before parliamentary committees in many national parliaments to clarify our actions and answer questions.

The political nature of our mandate has significant implications. It means that we are not at liberty to decide whether we should do what is necessary to deliver it. It is our duty to do so. Accepting failure is not an option when there are tools available for public servants to fulfil their mandates. At the same time, our mandates constitute a binding obligation: we must always operate strictly within the law. No responsible policymaker can ever conceive of acting ultra vires.

Everything the ECB has done during the crisis has been guided by this principle, and a particularly telling example is the situation we faced in mid-2015 with respect to Greece. At that time, we faced two sets of diametrically opposed opinions. One was that we should cut Greece off from central bank financing, which would have implied the full collapse of the Greek economy and the likely exit of Greece from the euro area. The other view was that we should provide unlimited, unconditional liquidity to the Greek government and the Greek economy no matter what. The former option would have meant the ECB triggering events of momentous political importance with potential implications for its mandate – the type of decision, moreover, that falls within the jurisdiction of elected authorities. The latter option, however, would have meant potentially engaging in monetary financing or funding banks without adequate collateral, thereby violating the Treaty.

So, we pursued a path that fulfilled our mandate, thereby remaining strictly within the confines of the law. The support given to Greece was substantial: at its peak, the combined lending of the ECB and the Bank of Greece to Greek banks reached €127 billion, or 71% of the country’s GDP. But it was never unconditional and it was never unlimited. Participation in an adjustment programme agreed with the Eurogroup guaranteed the quality of the collateral being put forward by Greek banks to secure their funding, in the form of government bonds. Various safeguards also prevented any monetary financing of the State. The ECB stayed within the confines of its mandate.

Ultimately, it was an approach that worked for both Greece and Europe, although the price paid by the Greek people was high. European solidarity, combined with the true courage and commitment of successive Greek governments, meant that a way was found to get through the crisis.

Since we were always extremely mindful of the scope and confines of our legal obligations, we were not concerned that some of our decisions were challenged in the European Court of Justice. On the contrary, it was welcome, because it allowed one of the highest legal authorities to verify the full legality of our actions, and to clarify what the ECB could and could not do. The Court not only affirmed that asset purchases are a legal instrument of monetary policy in the euro area, but emphasised the broad discretion of the ECB in using all our tools in a necessary and
proportionate way to achieve our objective. I have described our position as the obligation to “do everything it takes, [...] within our mandate, and to achieve our mandate”.

But understanding the scope and confines of our mandate imparts another obligation: to speak up when necessary and explain the available options. This is what is needed today.

I once described central bank independence as “independence in interdependence”. What I meant is that the institutional context in which we operate affects the speed at which we can achieve our objective, and the scale of the side effects of our actions. There is a need to say clearly when other policy areas could help us to do our job more quickly and effectively.

Central bank independence is not an end in itself. Its purpose is to ensure that the central bank is credible in its pursuit of price stability, while making sure that monetary policy is never subservient to fiscal policy – what is known as “monetary dominance”. Thus central bank independence does not preclude communication with governments when it is clear that mutually aligned policies would deliver a faster return to price stability. It only imposes limits on what such alignment could entail. Specifically, it means that alignment between policies, where needed, must serve the objective of monetary stability and should not work to the detriment of it.

This is why, since 2014, we have gradually placed more emphasis on the macroeconomic policy mix in the euro area, which is the respective contribution of monetary and fiscal policy in supporting the economy. We have seen in other regions where fiscal policy has played a greater role since the crisis that the return to price stability has been faster. In the United States, for example, from 2009 to 2018 the average cyclically adjusted government primary balance was -3.6%, while it was 0.5% for the euro area.

This is one of the reasons that interest rates in the United States have been able to rise sooner, while in the euro area they have been low or negative for a long time. A more active fiscal policy in the euro area would thus make it possible to adjust our policies more quickly, which we are well aware are having adverse effects on certain sectors of society and certain intermediaries.

It is always with this idea of “independence in interdependence” in mind that, throughout my mandate, the ECB has continuously advocated further institutional reform of the euro area. We have welcomed the improvements that have been made and urged governments and parliaments to continue working towards that goal. We have done so because we know that it is only by taking these steps that we can make our monetary union more resilient – and more able to deliver on the expectations for which it was created in the first place.

**Conclusion**

Allow me to conclude.

As I said in my introduction, I hope that many students from this university will one day choose to put their skills and energy to use in serving the public. If you elect to do so, I have no doubt that you will encounter considerable challenges, as all policymakers do. There will be setbacks and mistakes, because the world is complex. But I hope that you may find encouragement in the fact that, throughout history, decisions based on knowledge, courage and humility have always proven their value.

The establishment of the European Union, the introduction of the euro and the operations of the ECB have encountered many obstacles and faced many critics. And yet they have proven their worth, and it is now the “doubters” that are being doubted. This is part of the normal evolution of monetary unions, which is slow, non-linear and bumpy. The United States, for example, did not even have a central bank until more than 130 years after its establishment, while its federal budget only developed meaningfully in the 1930s. Today, few would consider winding back the clock.
What is important for a monetary union to evolve is that its citizens believe in but also contest the union, rather than seeing the world through a local lens. We saw this emerging in the most recent European Parliament election, which was perhaps the first such election fought mainly on European questions. Even those who were seeking to slow down European integration did so by contesting the EU institutions rather than rejecting their legitimacy outright. In the end, the European public elected a pro-European majority.

For this reason, I am optimistic about the future of Europe, because I believe that, over time, being a part of the EU and the euro area have, for most people, become the norm. The euro is more popular than it ever has been, while support for the EU also stands at its highest level since the crisis. Debates and critiques about the future of Europe are now less about whether it should exist, and more about how best to take it forward. That is a solid basis for our union to endure and, ultimately, to thrive.

9 See the article entitled “What is behind the recent rebound in euro area employment?”, Economic Bulletin, Issue 8, ECB, 2015.
13 As a percentage of potential GDP. OECD data.