# PROCEEDINGS OF THE CONFERENCE REBUILDING SOCIAL CAPITAL: THE ROLE OF CENTRAL BANKS

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# Contents

# Foreword

This report brings together the presentations delivered at the Conference "Rebuilding Social Capital: The Role of Central Banks". This high-level conference took place in Lisbon on 1 April 2022, as one of the initiatives to commemorate the 175$^{th}$ anniversary of the Bank.

The conference aimed to contribute to answering questions like the following:

- How should central banks contribute to rebuilding social capital?
- How should be improved the social contract for central banks?
- How should central banks reinforce accountability frameworks and enhance effectiveness, transparency, and trust?

These are essential questions, which we must all reflect upon. The growing multiplicity and complexity of roles has fundamentally changed the nature of central banking, bringing more responsibilities and much higher expectations among citizens. Strengthening trust and promoting proximity with society becomes more important, in parallel with more accountability, transparency and greater understanding by the public of the missions of a central bank. The conference and these proceedings contribute to further addressing the role of central banks in these current challenging times.

The Banco de Portugal would very warmly like to thank all the speakers at the conference. Their very enlightening interventions have inspired an active debate that should make central bankers and other policymakers think very seriously. A special thank you is reserved for Professor Harold James for his remarkably insightful keynote intervention, which fostered the subsequent discussions.

Banco de Portugal would also like to thank all the participants at the conference, who participated very actively in the discussion. Finally, the Banco de Portugal is very grateful to all the staff that contributed to the successful organisation of the conference and for the preparation of these proceedings.

# Programme

| | |
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| 12:00-13:15 | PANEL 2 \| Welfare considerations beyond price stability (employment; output growth; income distribution; climate change)<br>Antonella Trigari, Professor, Bocconi University<br>Gabriel Makhlouf, Governor, Central Bank of Ireland<br>Jordi Galí, CREI and Universitat Pompeu Fabra<br>Juan Dolado, Professor, Universidad Carlos III de Madrid |

# I Conference

# Opening intervention, Mário Centeno[1]

## Governor, Banco de Portugal


Mário Centeno, Governor, Banco de Portugal

Good morning.

It is with great pleasure that I welcome you to Banco de Portugal, and to the venue of our conference, the Money Museum, in itself a modest contribution to the social capital that bring us here.

This conference – that focus on the role of central banks in rebuilding social capital – is one of the events promoted to celebrate the one hundred seventy-fifth anniversary of Banco de Portugal.

This goes to the core of our social fabric. How we work together as Portuguese, Europeans, as Global Democracies.

To motivate this morning debate, allow me to ask you to travel back in time with me. Not as far as the year of the creation of Banco de Portugal, 1846, but only back five years, to 2017.

[1] As prepared for delivery.

That was the year when Portugal exited an 8-year-period of non-compliance with the European Union institutional framework regarding national budget deficits (the 3 percent threshold).

By any standards, 8 years of Excessive Deficit Procedures is, allow me the pun, excessive. The social capital of Portugal in the European Union was, probably, at its lowest level.

But, according to an opinion poll conducted in mid-2017, the feat of exiting the Excessive Deficit Procedure increased the Portugueses' self-esteem more than winning for the first time the European football cup or the Eurovision song contest.

For you to have an idea, as of how broad this effect was, I just need to let you know that it was true for both the subsample of men and women.

> To me, this demonstrates how citizens value the commitment to social contracts. That is why central banks must nourish and enhance the social capital of our societies. It is essential for economic and social development.
>
> For that reason, our Strategic Plan moto for 2021-2025 is "proximity and trust" with those who we must serve, the Portuguese citizens.

As a central bank, Banco de Portugal plays a key role in the process of consolidation of the country's social capital. We are committed to this built-up process, so that together we can successfully overcome the challenges ahead.

At this juncture in time, the historical challenges are considerable. In addition to the pressing debt legacy, climate change and digital transition challenges – particularly important in the traditional banking sector –, the economy was hit by two exogenous, now partially overlapping, shocks: the COVID pandemic and the Russia war on Ukraine.

The short-term effects are clear. The Russian invasion of Ukraine, in itself a demonstration of the lack of social capital, is slowing down the recovery. Also it is causing an inflationary environment, adding to the ones already in place, and temporary, due to the fast recovery from the COVID crisis. The new pressures on prices result from the escalation of commodity and energy prices, reduced confidence of economic agents and the effects of commercial and financial sanctions imposed on Russia.

In this context, a coordinated set of national and European policy actions is crucial to ensure sustainable growth in our economies.

For the Portuguese economy, there are two main courses of action to overcome successfully the challenges ahead.

At the national level, Portugal must continue to champion education. For many decades, which add up to centuries, Portugal lagged behind in the development race by neglecting the main driver: education. Claudia Goldin and Larry Katz have dubbed the twentieth century as the "Human Capital Century".

For Portugal, the twentieth century arrived only on the twenty first century. But ever since we have been keen to take that opportunity.

Knowing that social capital does not depreciate if used, but, on the contrary, it tends to enhance, we must remain resolute in the education front. This is a necessary condition to ensure our convergence within Europe.

Moreover, by investing in education, we increase the equality of opportunities, we reduce income and wealth inequalities and improve our labour force.

Above all, we boost the country's social capital. We promote horizontal and participative institutions.

The recent reaction to the COVID crisis was a leap of integration in Europe because it was widely accepted by all Europeans. Because it was the translation into action of a deep desire to sort out our common difficulties with a common action plan.

And it was made possible by several years of risk reduction, that made room to the biggest moment of European social capital building since the creation of the euro. The NGEU and its funding structure.

That is why it is crucial to use productively the resources made available by the Recovery and Resilience Plans.

Only then can this enormous European effort materialize in a permanent increase in production capacity, while promoting a greener and more digital economy, without compromising fiscal constraints.

From a political perspective, or shall I say, from a social capital perspective, this is also a defining moment: for the first time in its history, Europe issued common debt – a "no go" not that long ago.

But that comes with an increased responsibility: all countries need to deliver on the implementation of their transition programs. Failing to achieve it would not only constitute an economic loss, but also impose a setback in the construction of a solid European institutional framework.

More than ever, policy decisions should enhance the role of social contracts, when complementing monetary and fiscal policies.

> The trust in the euro, measured by the Eurobarometer, usually suffers with European crisis. This time it reached a maximum in the context of the COVID crisis.
>
> Europeans considered the euro as part of the solution, not as part of the problem. Because the euro institutions, including our NCB and the Eurosystem delivered in a collective way.

In this vein, with a special focus on maintaining the stability and predictability of its actions, Banco de Portugal is currently engaged in building a closer relationship with citizens, enhancing a more relevant and active coordination with institutional players. This includes national and international institutions, and also academia. We are also deepening the exchange of information with market participants.

We aim to promote and widen the public debate on the economy and on Europe.

We aim to be the interpreters for the society of financial and economic developments. And, specially, financial stability.

Moreover, Banco de Portugal is expanding its work on financial literacy to domains such as economic and statistical literacy. These areas of knowledge are fundamental for informed decision-making, contributing on its own to the enhancement of the Portuguese social capital.

As a central bank, we have unique obligations and will use our technical capabilities, credibility and independence to this endeavour.

We have an outstanding panel of distinguished guests. From academia to policy makers, if such a distinction makes sense when discussing social capital.

I am eager to hear your views on how central banks can improve social capital. Not only in the domains of their core mandates regarding price stability and financial stability, but also concerning employment, output growth, income distribution and climate change.

The theoretical foundations of social capital are well established. Allow me to recall the work by Harvard's Robert Putman, but also of Professor Harold James, that we are so fortunate to have here with us today. Your great contributions to this topic improve why central bank can think of themselves in their key contribution to our societies.

Without further delay, I welcome Professor Harold James to share with us a keynote speech on the role of central banks in rebuilding social capital.

The floor is yours Professor.

# Keynote Speech, Harold James[2]

## Professor, Princeton University


Harold James, Professor, Princeton University

Good morning.

Thank you, Governor Centeno, for your hospitality and your great welcome.

It's wonderful to be here and to think about this important topic.

It's, I think, an auspicious occasion on the celebration of the 175$^{th}$ anniversary of the foundation of the Banco de Portugal.

But it's also obviously a frightening and worrying moment in the aftermath of two years of pandemic.

The last time I was in Lisbon was almost precisely two years ago, at the beginning of the pandemic, and now we are in the middle of a security crisis in the wake of Russia's invasion of Ukraine.

But not just in the wake of those crises.

The last 12 years have been very difficult.

[2] Based on the transcript of the intervention. The supporting presentation is available at: https://www.bportugal.pt/sites/default/files/harold_james.pdf.

Industrial societies have been overwhelmed by a tidal wave of distrust.

I wanted to take as a guide Elvis Presley, and particularly the great song, Suspicious minds: "We can't go on together with suspicious minds, and we can't build our dreams on suspicious minds".

## Elvis: Suspicious Minds

Why can't you see
What you're doing to me
When you don't believe a
word I say

What is the basis of suspicion or the breakdown of social trust? I think the doubts are on two levels.

First, concern about the competence or effectiveness of governments and political institutions in managing responses to economic, medical, diplomatic security, military emergencies. And, secondly, fears about a loss of privacy in a world dominated by information controlled primarily by private companies or big tech, that may manipulate price signals in order to influence and mould behaviour through complex and intransparent algorithms.

These worries build on each other, and I think they are what creates the paranoid mindset: Suspicious minds.

> Social Capital, and Governor Centeno already referred to this, social capital is built through robust interpersonal connections, trust in others and a backstop in the form of legal enforcement. Trust in price signals, the specific responsibility of central banks, is a vital component of the way in which we interact. Rapidly changing prices, either inflation or deflation, undermine the basis of trust.

The heart of the mission of central banks is generating this kind of specific trust. In the global financial crisis, especially after 2010 central banks were at the centre of crisis management and crisis containment. That was a consequence of politics or maybe more specifically the result of political failure.

For different reasons, the US, the UK and the euro zone all moved to quite abrupt fiscal tightening and backed off from the 2008/09 mantra of coordinated anti-crisis fiscal stimulus. So central banks were left holding this rather fragile baby of the world economy, and they were then described as rock stars or the only adults in the room.

It's tempting to think after this experience, after the successes of dealing with the global financial crisis in the sense that there was no repeat of the inter war Great Depression and in the financial response to the COVID-19 crisis, that these were really uniquely successful.

And now central banks are again providing a crucial weapon in the fight against Vladimir Putin's aggression.

It's not surprising, then, that the role of central banks has brought relief and praise, but also a kind of backlash or criticism. All over the world the central banks seemed to stand right at the centre of social fissures.

In the United States there has long been an anti-Fed sentiment on the far right and on the far left and the global financial crisis produced more demands to audit the Fed amid a heightened concern with racial and social equity. It looked as if the central bank's action had driven up asset prices and fuelled a rise in wealth inequality.

In Europe, the ECB and appointments to its boards became a part of an epic struggle between north and south.

The Bank of England was criticised for political interventions in the 2010 elections, for being sympathetic to the “Remain” cause before and even after the 2016 referendum and now for calling for wage moderation as part of an anti-inflation strategy.

The Financial Times economics commentator Martin Sandhu tweeted:

“Why does the governor of the Bank of England encouraged restraint in wage demands but not call for restraint and businesses’ attempts to protect their profit margins? Intellectual bias, ideology, greater resignation with regard to price than wage setting, or something else?”

If central banks can do a lot, and I think that was exactly the experience of the last decade, they actually can't clearly do everything: they can't make vaccines, antiviral drugs or, for that matter, anti-tank missiles.

They can't live up to everybody's expectations in societies that have become more and more polarised. And this, I think, is a classic tragedy of rising expectations. Central banks promise stability. They create expectations of more stability. And then they're bound to encounter disenchantment when the world turns out to be uncertain, insecure, and threatening.

That's precisely Elvis's trap:

“I can't walk out because I love you too much, baby. Why can't you see what you're doing to me when you don't believe a word I say?”

How can Central Banks’ declarations of their credibility really be expected to evoke trust, if projections and assurances are turning out to be so unreliable?

What exactly should central banks do in this situation? It's really hard to claim that they should concentrate on making better guesses about an unpredictable future. That's especially true when we don't know, and we can't know about geopolitical uncertainty, the pace of climate change or even the dynamics of social disintegration.

Today I think the balance is different to 2010. Instead of the worry then about debt there is perhaps today too much of a confidence that high levels of government debt can be sustainably financed and too much belief that there are really easy solutions. COVID-19 led to a push for governments to do more and at the same time increase the extent of fiscal strain.

Greater military expenditure clearly needed now, new price surges, shortages, scarcities, the need to deal with the humanitarian challenge of large refugee movements: all this is going to add to the strain and it's good, as Governor Centeno said, that there was a period in which there was a resilience that was built up in advance of this. This is exactly what resilience is supposed to do.

But the effect of the past decade, as well as the new extent of the strain, leads, I think, to the assumption that central banks will be pushed by politics to fall in line.

There's a profound challenge here because the successes of the 2010s relied fundamentally on the assumption that government debt in advanced countries, and also in many but not all key emerging markets is practically free from inflation risk, and that governments will, in consequence, be able to borrow from investors at a lower rate than the investors themselves used to discount the future.

This can be thought of as the extraordinary privilege of the safe asset. So it's a consequence of the success of central banks in terms of what was regarded in the late 20th century as the primary task of central banks delivering on price stability.

That is what made all that extraordinary action of the last decade or 12 years or 14 years really possible.

> And price stability is clearly at the core of what people think of when they try to define what a modern central bank should do. It's the way that in the 1970s, the Fed's mandate was redefined with the dual mandate of price stability and employment criteria. It's behind the formulation of the ECB statute. It's behind the 1998 Bank of England Act, which for the first time in history gave a really clear definition in the statute in a piece of legislation of what the Banks' task should be.

It's interesting and important, I think, and that's the opportunity that a historical conference gives us, to reflect on 175 years of history of the Banco de Portugal. It's a great opportunity to think of whether this was always what central banks were doing. In fact, this concentration on price stability is really quite new and the tasks of central banks before that were defined in terms of two other sets of priorities.

First of all, public debt management. That's why the Banco de Portugal was founded or why the Banque de France was founded. I think it goes back to 1694 and the creation of the Bank of England, and the Bank of England looked like a unique success. It was then admired by Alexander Hamilton or by Napoleon and taken as a model to be applied in the first bank of the United States or in the Banque de France. And the primary purpose of the Bank of England, when it was created,


was to manage the public debt and it succeeded in doing that and in pushing down interest rates as a result of that successful management.

But what was the purpose of it? I talked about the 1998 legislation, saying that the purpose of the Bank of England is price stability. But in 1694 what the statute defines as the purpose of the Bank of England is, particularly, security. "Carrying on the war against France" is the language of the statute that creates the Bank of England.

Then in the middle of the 19th century, with the beginning of a phase of financial globalisation, with big cross-border capital movements, there's a new objective of central banks: financial stability. And the central banks that are created in the late 19th century don't really have the objectives that the first generation of central banks, including the Banco de Portugal had, and they're much more focused on financial stability.

The German Reichsbank, the predecessor of the Bundesbank, was created not with the German Empire in 1871 but a few years afterwards, and primarily as a response to a big financial crisis in 1873. And the Federal Reserve System was created a long, long time after the creation of the American Republic in 1914 in the aftermath of a severe financial crisis in 1907. The legislation that creates both those banks makes that point very specifically.

So when central banks are rethought in the late 20th century, they are actually repurposed to avoid those focuses.

In the 1990s, when central banks were redesigned the redesign involves in many cases eliminating both debt management and a financial stability mandate. The aim was precisely to ensure price stability by removing responsibilities that might conflict with price stability.

There's a danger of fiscal dominance when high debt levels mean that central banks worry that they are damaging the government's balance sheet by raising interest rates. And there's a danger, a parallel danger, of financial dominance when a large banking sector is threatened by insolvency and requires and pushes for, and lobbies for, a general raising of asset prices in order to avoid that fate.

So when the Bank of England was redesigned in 1997 and 1998 government debt management and financial supervision were both taken away from the Bank of England.

The financial supervision mandate in the ECB is stated in a deliberately vestigial way and the direct debt financing is, of course, prohibited.

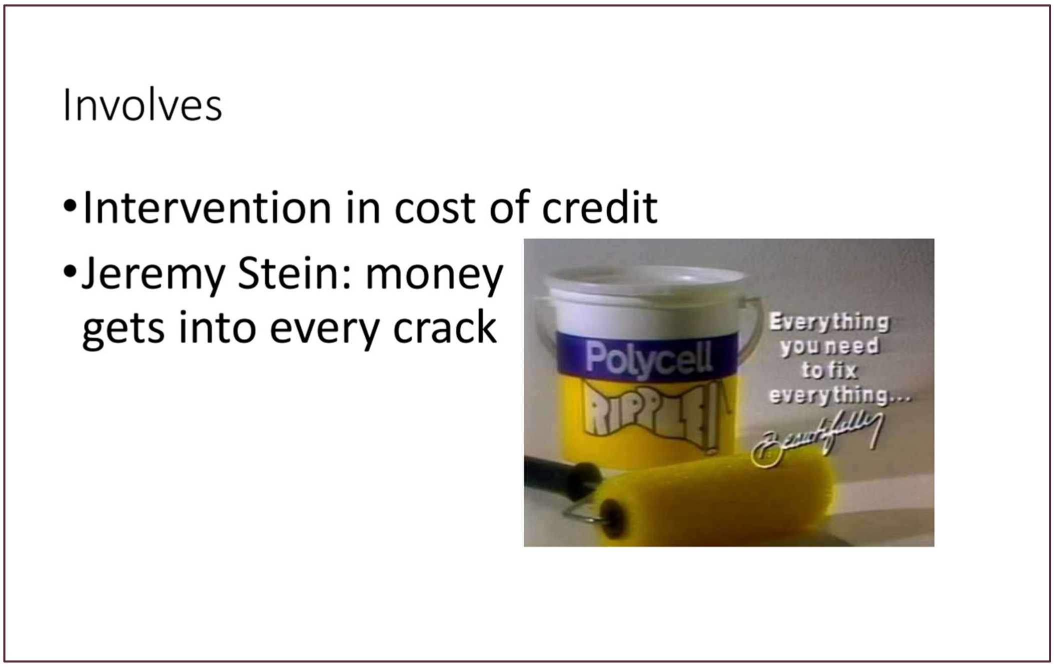
This looked like a way of solving problems. The only way that central banks, it was argued, could foster financial stability was by fostering a macroeconomic environment with low and stable inflation and sustainable economic growth. And with debt management the claim at that time was that it was better for the central bank to treat the government as simply another, albeit a large, borrower.

These positions were, as they were formulated in the 1990s, too extreme.

It was inevitable after 2008, when financial crises came back big time, that the concerns that had motivated these historical creations in the first place would appear again. And the old tasks became central once more.

Those old functions of debt management and financial supervision involve interventions in the cost of credit or the business of lending that affect the price of assets. And they're both central to the task of stabilizing the social fabric, building or rebuilding social capitalism.

That was exactly the attraction of the post 2010 crisis interventions. There's a famous phrase coined, I think, by Jeremy Stein, but it may be that somebody said this earlier that “the great thing about money is that it gets into every crack.” It's “everything you need to fix everything” (Polly filler).



But it's exactly that successful stabilisation of expectations that produces a pushback. Is it either really desirable or even feasible to push resources in every direction?

Central banks were supposed to pour liquidity into the growing and profound fissures of civil society. But what if those fissures were really bottomless pits? Shouldn't there then be a policy emphasis that ensured that poorer or more remote people should get better access to credit? Should there be a way of thinking about credit as a way of building a more environmentally sustainable future?

Recently, central banks have addressed both these issues explicitly, but they're highly, highly, controversial.

The new nominee of the Biden administration for the Fed's bank regulation position, Sarah Bloom Raskin, said that financial regulators should consider how regulatory changes relating to disclosure, access to credit and pricing of risk, support a rapid and just green transition. But when she came under pressure in the nomination process, she retreated to the observation that it's inappropriate for the Fed to make credit decisions and allocations based on choosing winners and losers. Even with that retreat, the administration dropped her candidacy.

It's clear why there is this problem. Both debt management and bank regulation can easily be subject to abuse. In the first case, we call it fiscal dominance. In the second, we call it financial dominance.

Credit expansions designed to combat fiscal disequilibrium, or a threat of financial crisis may end up by augmenting both and producing in the end, greater vulnerability to collapses and reversals. So these old functions of central banks, the debt management, the financial stability are ones that provoke just as much dissent because they have really profound distributional consequences.

In the case of the eurozone, buying government securities was justified as ensuring the effective transmission of monetary policy. But buying corporate bonds raises another set of issues. Should the central bank try to shape the economy so as to make it more productive or resilient? What criteria should it use to determine what's environmentally sustainable? Or should, if you think that the environment has changed or the risks have changed since February the 24th of this year,

should, for instance, armaments manufacturers be regarded as equally vital to the securing of a decent future as environmental investments and should they be accorded preferential access to credit facilities?

It was exactly those kind of arguments in the interwar period when central banks did do that kind of intervention, and they tried to push credit in particular ways to particular sectors of the economy that launched a discussion about whether central bank independence had been abused and whether it should, in consequence, be ended.

So we have a set of issues after the COVID-19 and after Ukraine, in which there is much more uncertainty. And I think an easy way of thinking about the uncertainty is in terms of thinking about how it relates to inflation expectations.

Initially, in response to the COVID-19 crisis, there was widely thought to be a risk of deflation and that would, I think, justify the continuation of the post 2008 or 2010 course. Now, the risk appears rather more dangerous on the inflation side, in particular as inflation risks appear to be greater and more likely to be sustained in the wake of massive and ongoing commodity and supply chain shocks that will linger on for some time.

Some of the old arguments in favour of central Bank independence will appear again, and it's worth thinking about how those debates occurred in the past and how they played out in the past.

We can think of the COVID-19 crisis as a warlike emergency in which exceptional measures are needed, but what happens when you move out of that?

In the aftermath of the First World War, central banks were justifying their position initially when they were accommodating inflation as the result of a patriotic necessity. Accepting fiscal dominance was a patriotic necessity.

But exactly the same language occurs after the Second World War, and I think, very interestingly, in the debate about Fed independence and federal autonomy in the aftermath of the Second World War and the great crisis in the relations between the U. S. Government and the Federal Reserve System in 1951 which produced the Treasury-Fed Accord. The background of that crisis was again a national emergency, in the Korean War, and Harry Truman summoned in the entire Fed Open Market Committee and gave them a lecture about patriotic necessity.

He emphasised, and this is the quotation from the minutes of that meeting in the White House, “that we must combat Communist influence on many fronts. He said that one way to do this is to maintain confidence in the Government's credit and in Government securities. He felt that if people lose confidence in Government securities, all we hope to gain from our military mobilisation, and war if need be, might be jeopardised.”

At that point he was challenged by the former chair of the Fed, who was still on the board, Marriner Eccles, the major dissident who was then very hawkish on inflation, but also laid out the alternative in terms of foreign policy because Eccles didn't like the Korean War, and “he worried that the United States was stumbling into an uncharted Asian morass without reckoning the costs”. This is the quote from that same transcript.

So what's the modern equivalent to this argument about national security?

When I originally contemplated this discussion before the 24$^{th}$ of February, I thought it would really be impossible that the language of national security would appear again, at least in Europe or the United States, although it might appear in other countries. It appears, for instance, very clearly when Turkey's president, Erdogan, sacks one central bank governor after another and accuses the central bank of giving in to an international lobby of currency rates speculators, an interest rate lobby, credit rating agencies and so on.

> But I think now we have an issue where we have the new security needs, but also the older priorities in terms of thinking of climate change, the sustainable future as an overriding national or supranational European global interest.

The wider activity of central banks and the expansiveness of their mission, if you take all this literally – if you take the national security arguments, if you take the environmental arguments seriously – , it points, I think, clearly in the direction that central banks need to be more firmly embedded in the overall institutional framework of a democratically elected government.

With such ambitious tasks with broad and potentially unknown and unknowable political and social implications, they can't just be left as a delegated operation focusing on one narrow goal, price stability. Well, I was tempted initially just to leave it at that, but I don't think it would be right to leave it at that because there is very distinctly and that's where I started from, also a need for monetary stability.

> But it's changed. The discussion of credit and credit-based money today is very different than it was in the past, mainly because the credit and debt economy has taken off so spectacularly. We're not dealing mostly when we deal with money anymore with public money, central bank money, but almost entirely with privately generated money, credit.

In the U. K., for instance, just 3% of money held by the public is in the form of notes or cash, and the rest is in bank deposits. There are two sources of weakness, particularly in an era of pervasive uncertainty that inevitably goes with deep structural and technical change. And what we're seeing at the moment and why the inflation debate is so difficult is that it's not just an overall aggregate movement of prices evenly in one upward direction, but it's a very sharp movement of price differentials.

So, in this uncertainty, the two sources of difficulty are these. First, credit is based on confidence and is vulnerable to sudden reversals into bad news. Regulation may try to contain those vulnerabilities, but then the source of risk shifts to unregulated areas away from banking to private finance or non-bank lending into the crypto world. So the risks in new areas increase, and then it's only after they've been fully exposed, and probably only after a new crisis that there's really a clear sense of what to regulate.

The second weakness is more fundamental, but also, I think, deserves consideration. If you think about what credit-based money or private money is based on, it requires the accumulation of information about the borrowers. It's possible, in that sense, to develop a futuristic scenario, maybe it's a utopia, or maybe it's a dystopia in which everything depends on credit that's linked to information held by giant companies operationalised through algorithms and those who would be unwilling or unable to supply that information are cut out.

> Already I think there's a clear differentiation between countries in terms of access to banking. The proportion of the unbanked varies considerably. There's a nice ECB study of this and the eurozone as a whole. The population without access to banking is much lower than it is in the United States, where this is really a major social problem and a problem about social trust and the social fabric. But in some countries, it's considerably higher, and it's not surprising that those are also the countries where there's less trust and social capital is more uncertain.

This is thus a strong argument for providing a standardised public currency that doesn't depend on credit alone, or we could think of it as a token-based currency. Existing notes and coins do this, but they can't be used in as many transactions or as conveniently as bank transfers can be managed. And that is a cost that is imposed on the poor and the most vulnerable.

That's exactly the case for the provision of central bank digital currency, as it was laid out very clearly by my colleagues and friends Markus Brunnermeier and Jean-Pierre Landau in their report for the European Parliament, “The digital euro: policy implications and perspectives”.

There is stability and efficiency, but also justice arguments in making a stable store of value available to all citizens that would help to bridge the banking and the digital divide in a period when money is in flux. Because of technical innovation around Blockchain technology, the provision of certain non-credit based money is once again a priority that might offer a source of stability. Stabilizing the social fabric would in particular involve extending the certainties of money to citizens who at present don't have bank accounts.

It's precisely the privacy concerns, the expectation that we have that public authorities must be above the fray, that suggests that central banks shouldn't extend their functions into an all pervasive micromanagement of credit, and that kind of extension would really be a big brother or a securer version of a Soviet style central planner.

There is a need to continue to operate a general monetary policy on the basis of a stable unit of account where that isn't provided. This isn't really the discussion I think in Europe or the United States, but it is the discussion in many parts of the world, in Central Asia or in South America.

When governments can't provide this kind of basic provision of a stable currency, the demand is taken up by private and most likely less transparent and less reliable manufacturers of alternatives that claim to be stable. And here, finally, some really frightening possibilities open up.

It's possible to imagine extended as it were optimal digital currency areas, where likeminded people with similar consumption and behavioural patterns interact through money as a binding common language independent of state frontiers but binding particular communities together.

Some people think of this as a benign future of self-realisation, but it's possible also to see it as the promoter or accelerator of a new sectarianism.

Indeed, some figures on the American right are starting to think of an alternative Metaverse, in which there are separate dating networks. Peter Thiel has founded something called The Right

Stuff because, he says, "conservatives deserve an easy way to connect." There are then separate communication platforms, with the video-sharing Rumble replacing YouTube, messages of services and, finally, money where a Blockchain MAGA coin has been launched as a stable or deflationary option for the MAGA community with the intention of also using the resources generated to finance MAGA activities.

There can just as well be left wing alternatives to that. Indeed, some existing Blockchain systems have different political flavours with Ethereum and XRP more to the left than the more conservative or libertarian Bitcoin.

If this is so, this would offer a risk of political societies that are just tearing themselves apart, divided by different monies with fragmented subunits measuring their strength by their relative exchange rates.

A key test of the effectiveness and the credibility of central banks will thus derive not from the ability to manage the credit-based economy but also increasingly, from the demand of citizens for stability and for an alternative to the yo-yo instability of the credit economy and the inherent divisiveness of private currencies, that dystopia of the MAGA coin world.

> Citizens want a centre of stability in a world of radically changing expectations. That, I believe, is the way that central banks can and should contribute to building social capital and to calm or reassure the suspicious minds that Elvis Presley warned us about.

Thank you so much.

# Session: A new social contract for central banks in times of shifting societal concerns[3]

The forces driving the world economy (technology, demographic trends, and globalisation, amongst others) have generated economic progress but are putting the social contract – the way in which the provision of collective goods is organised in the society – under strong pressure. Within societies, a dominant view is emerging that economic outcomes are not achieving fairness and equality of opportunities.

The prevailing conviction that the social contract is breaking down reflects many facts: increasing income and wealth inequality, unequal labour market prospects, unfairness of opportunities across generations, low productivity gains, the rise of market concentration in some industries, environment exploitation, and the inequality of opportunities in advanced versus low-income economies.

These shifting societal concerns are pressing governments, authorities, individuals, businesses, and civil society in general to redesign the way in which societies and economies function, in order to achieve a greater fairness of outcomes and sharing of risks. A new social contract is needed.

[3] Available at:
https://www.bportugal.pt/sites/default/files/pedro_duarte_neves.pdf

Rebuilding social capital – the strength of communities, relationships and trust – is essential for economic and social development.

Technological and digital acceleration, structural transformations of how people work, demographic decline, slowbalisation, shifting economic power towards emerging economies, and climate transition are creating a transformed world with structurally higher uncertainty. The tensions caused by the pandemic have intensified technological, societal and economic change. These underlying trends, the asymmetric recovery from the pandemic shock across economic sectors, and the necessary transition to a more sustainable economy are likely to have a very heterogeneous impact on businesses and individuals, with potentially large effects on the allocation of resources.

The senseless war in Europe has brought about – beyond the suffering and humanitarian tragedy – strengthened risks for price developments and growth prospects, further amplifying all the existing uncertainties. Policy makers were already facing the unpleasant combination of a recovery together with rising inflation, in a context of normalisation of fiscal and monetary policies. They now have to handle the very unfortunate coincidence of an energy supply shock, higher commodity prices, trade disruptions, renewed disturbances in supply chains, and the debt legacy of the pandemic, which further increased financial leverage.

The aftermath of the Great Financial Crisis brought new challenges for central banks. The growing multiplicity and complexity of roles has fundamentally changed the nature of central banking, bringing more responsibilities and much higher expectations among citizens. Central banks are required to play a more influential role, creating confidence and greater understanding of their missions. Strengthening trust and promoting proximity with society becomes preponderant, in parallel with greater accountability and transparency.

The conference *Rebuilding Social Capital: the role of Central Banks* addresses the role of central banks in these challenging times.

- How should central banks contribute to rebuilding social capital?
- How should be improved the social contract for central banks?
- How should central banks reinforce accountability frameworks and enhance effectiveness, transparency, and trust?

# Panel 1: Social Capital and financial stability

Below, from left to right: Pedro Duarte Neves, Claudio Borio, Lucrezia Reichlin and Pablo Hernández de Cos; Above: Athanasios Orphanides

## Chair

- Pedro Duarte Neves, Banco de Portugal

## Speakers

- Athanasios Orphanides, MIT Sloan School of Management
- Claudio Borio, Bank for International Settlements
- Lucrezia Reichlin, London Business School
- Pablo Hernández de Cos, Banco de España

# Panel 1: Social Capital and financial stability

The role of central banks in preserving financial stability is significantly more demanding today than it was before the Great Financial Crisis. Knowledge of the interactions between monetary and fiscal policies is very important, in particular under the current low-for-long interest rate environment. Financial reforms were decisive to rebuild social capital, restoring trust in market mechanisms and institutions. The reform process is however not completed and many challenges still lie in the years ahead.

- It is too vivid in our memories how high the social costs of financial instability can be. As new risks to financial stability have appeared on the horizon – like the existence of pockets of overvaluation (credit, stock, and housing markets), increasing risk-taking and record high levels of debt (public and private) – how should this be incorporated in monetary policy? Should central bankers deviate from their objectives of price stability to promote financial stability? Which improvements in policy frameworks – monetary and macro-prudential policies – could reduce the incidence of financial crisis episodes?

- The Basel regulatory reform still lacks consistent implementation across the globe, whereas macro-prudential policy for the non-banking sector (including insurance and pension funds) is in its infancy. What is it still missing in the regulatory reform? What are the lessons learned from the pandemic crisis on the functioning of the macro-prudential framework for the banking system? What is the right balance between new regulation and reinforced supervision?

- Covid-19 has further underlined the importance of addressing emerging structural trends that impact global banking systems, like the digitalisation of finance, the sustainability of banks' business models, and climate-related financial risks. How to address and mitigate the resulting risks with a forward-looking perspective?

- Crypto-assets and associated products and services are growing fast, increasingly interlinking with the regulated sector and potentially changing the international monetary and financial system. How should global standards for regulation of crypto assets be defined and implemented? As the supply of financial products and services is changing so fast, are financial authorities doing enough on the demand side through financial literacy and financial inclusion initiatives, in an increasing digitalised environment?

# Introduction, Pedro Duarte Neves[4]

## Banco de Portugal


Pedro Duarte Neves, Banco de Portugal

Good morning to everybody. Let me start by saying that is really a great privilege for me to moderate this session, in such an important date for the Banco de Portugal.

Let me now move on by introducing this Session and Panel 1.

The last 15 years have brought new challenges for central banks.

The growing multiplicity and complexity of roles has fundamentally changed the nature of central banking, bringing more responsibilities and much higher expectations among citizens.

Central banks are required to play a more influential role, creating confidence and greater understanding of their missions. Strengthening trust and promoting proximity with society becomes preponderant, in parallel with greater accountability and transparency.

This session, which has two panels, addresses the role of central banks in the current challenging times.

[4] Based on the transcript of the intervention. The supporting presentation is available at: https://www.bportugal.pt/sites/default/files/pedro_duarte_neves.pdf.

The first panel is on Social Capital and financial stability. Financial stability is an essential contribution of central banks to social capital. The role of central banks in preserving financial stability is significantly more demanding today than it was before the Great Financial Crisis.

Financial reforms were decisive to rebuild social capital, restoring trust in market mechanisms and institutions. The reform process is however not completed and many challenges still lie in the years ahead.

This panel is going to address questions like the following:

- What is it still missing in the regulatory reform?
- Which are the lessons learned on the functioning of the macro-prudential framework? [namely from the pandemic crisis]
- Which improvements in policy frameworks – monetary and macro-prudential policies – could reduce the incidence of financial crisis episodes?
- How should monetary policy take into account financial stability considerations? [in a context in which macro-prudential policy remains incomplete]

We are very lucky to have 4 very distinguished participants on this panel: Athanasios Orphanides, Professor at MIT, Sloan School of Management and Former Governor of the Central Bank of Cyprus; Claudio Borio, the Head of the Monetary and Economic Department at the BIS; Lucrezia Reichlin, Professor of Economics at the London Business School and the first Chairman of the CEPR Euro Area Business Cycle Dating Committee; Pablo Hernández de Cos, Governor of Banco de España, and Chair of the Basel Committee on Banking Supervision. Each one will have 10 minutes for the initial intervention.

We will start with Athanasios [who is joining us from Boston via Webex]. Good morning and thanks for joining us so early in the day for you. We look forward for your presentation.

# Athanasios Orphanides[5]

## Professor, MIT Sloan School of Management

Athanasios Orphanides, Professor, MIT Sloan School of Management [joining via Webex]

It is an honour to participate at this celebration of the 175th anniversary of the Banco de Portugal. I am grateful for the invitation to discuss the role of central banks in rebuilding social capital.

As Governor Centeno noted in his introduction this is about "How we work together". This is so important for the success of the European project. If the European Project is to succeed, European institutions, governments and citizens must all work better together and not against each other.

This is still work in progress. As the title of the conference suggests *rebuilding* is in order. It is important to recognise past policy errors that harmed social capital in Europe. Learning from past mistakes is how institutions grow and become great institutions over time.

> Rebuilding social capital is fundamental for the success of the European Union. The Union is founded on shared values, with the objective to promote the wellbeing of its people.

[5] Based on the transcript of the intervention. The supporting presentation is available at: https://www.bportugal.pt/sites/default/files/athanasios_orphanides.pdf.

Towards that end, the Union's decision-making bodies, including its independent institutions, have the responsibility to promote growth, economic and social cohesion, and solidarity among member states. This is clear-cut: it is article 3 of the Treaty, that we all take as given and as part of the mandate of all institutions in Europe.

Financial stability is a prerequisite for achieving these goals. To meet the Union's objectives, financial stability must be achieved *everywhere* in the Union. This is important to understand. Stability in parts of the Union, supporting growth and social progress in some member states, is incompatible with the Treaty if it's accompanied by instability elsewhere in the Union.

This is why it is so important to work together. ECB policies, in particular, that promote stability in some member states, but instability in others are contrary to its mandate and against the interest of Europe. I will focus on this point, since we are discussing the role of central banks in rebuilding social capital.

This role of central banks is more important in crises, such as the euro crisis from a decade ago and, more recently, the COVID-19 crisis. When crises occur, policies that are known to contribute to divergences are contrary to the Union's goals. And yet, unfortunately, the euro area has not been free of such policies over the past dozen years.

Since the creation of the euro, the Union's record in this respect has been decidedly mixed. As is well known, the euro area failed in managing the very first serious crisis it ever faced: the global financial crisis. In the aftermath of that crisis, some governments successfully used their leverage over common institutions to protect the narrow interests of those member states over the common good. This contributed to greater financial stability and faster growth in some member states at the cost of catastrophic instability and avoidable misery imposed on their people of other member states—a gross a violation of the letter and the spirit of the Treaty. The global financial crisis morphed into the euro crisis in Europe.

The success of the Union rests on shared prosperity. Unfortunately, a decade was lost with the euro crisis. Narrow national interests dominated over the common good. The ECB did not promote shared prosperity as well as it could.

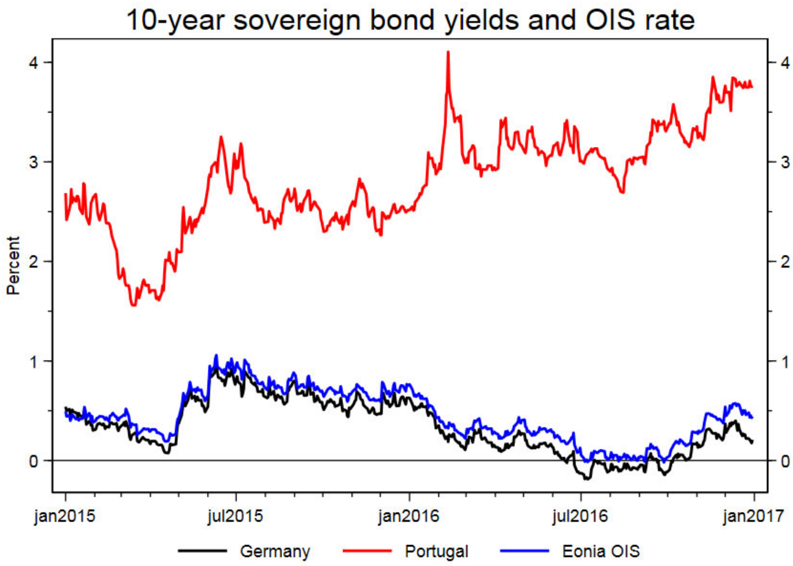
More recently, the initial response to the pandemic showed a similar predisposition by the governments of some member states to protect their national interest over the common good. This was evident in the chaos observed in February and early March in 2020. This changed quickly. I believe we were very fortunate that, within weeks of the start of the pandemic, it was recognised that solidarity and a common response to the pandemic was critical for the wellbeing of all. Despite all the devastation from the pandemic, this crisis was better managed.

As the most powerful common independent institution, the ECB's responsibility in the success of the European Union and especially in the euro area, is tremendous. Unfortunately, in the euro crisis ECB policies contributed to divergence across member states, protecting financial stability and growth in some member states far better than in others.

The ECB's response to the pandemic was considerably better, in part because the ECB decided to temporarily suspend application of earlier discretionary decisions that were known to induce instability and divergence. During the pandemic, the ECB was able to contribute to cohesion and solidarity in Europe, in accordance with its mandate. It is important to recognize this success and draw the correct lessons from it.

Let me remind you of one fundamental flaw in the ECB policy framework that contributed to much of the carnage that we had seen in the euro crisis, and which was avoided during the pandemic. Unlike any other central bank, the ECB has been relying on credit rating agencies, such as DBRS, to determine whether the government debt of member states is eligible for ECB operations.

No other central bank anywhere operates in this manner. This is unique to the ECB and known to be a source of instability. This is the policy that led to a series of debt rollover crises in the euro area since the global financial crisis. This audience is intimately familiar with the cost. Let me remind you of the consequences of this ECB policy for Portugal in 2016.[6]




The figure above compares the yield on 10-year government bonds in Portugal and Germany and the 10-year overnight index swap (OIS) rate. When the transmission of monetary policy works well, government bond yields move together with the OIS rate. When the ECB eases monetary policy, this is reflected in a lower OIS rate and is transmitted to the economy with lower government bond yields. In 2015 the ECB started implementing a quantitative easing programme through purchases of government bonds. Indeed this was reflected in a decline of the OIS rate and also in a decline of the German government bond yield, evidence that ECB policy was well transmitted in Germany. However, this was not the case in Portugal. Instead of declining, the government bond yield in Portugal was rising during 2015-16. Why? What was the reason? The reason was the ECB's reliance on credit rating agencies to determine the eligibility of government debt for its operations. At the time, DBRS was contemplating downgrading Portugal, which, according to the ECB policy would have made Portuguese government debt ineligible for monetary policy operations. Investors were concerned that this ECB policy would induce a debt rollover crisis in Portugal, even though this was not warranted by fundamentals.

Forcing the Portuguese government to pay a few percentage points above what was warranted in order to finance itself was costly. It meant taxes had to be higher in Portugal. It meant social spending and investment had to be lower. It meant growth and employment had to be lower. All because the ECB decided to delegate its policy to a credit rating agency. Portugal avoided being

[6] This exposition draws on Yvan Lengwiler and Athanasios Orphanides, "Options for the ECB's Monetary Policy Strategy Review," Study for the Committee on Economic and Monetary Affairs, Policy Department for Economic, Scientific and Quality of Life Policies, Luxembourg: September 2020. https://www.europarl.europa.eu/RegData/etudes/STUD/2020/652753/IPOL_STU(2020)652753_EN.pdf.

downgraded by DBRS on 21 October 2016. Yet, as seen in the figure, the extremely high penalty on the Portuguese people, in the form of an unwarranted spread on government debt, remained. As reported by the Financial Times: "The rating is not forever. In April, DBRS will revisit its rating, so for the next six months, Portugal's fate will again depend on a little-known credit agency based in Toronto"[7]

More recently, the ECB was very close to another crisis in Europe. Indeed, in March of 2020 bond markets were close to a collapse, and numerous interventions, including bond purchases by the ECB, proved insufficient to maintain stability. The problem is that the ECB remained silent on a most critical issue: The eligibility of government bonds in its operations.

On 22 April 2020, the ECB took an important decision that succeeded in restoring stability. On that day, the ECB suspended its reliance on DBRS and other credit rating agencies in determining the eligibility of government debt for monetary policy operations. This was incredibly, incredibly important for the euro area. The 22 April 2020 decision was not a permanent correction of the flaw in the ECB's monetary policy framework, but a permanent correction could have been introduced in the context of the ECB's monetary policy strategy review that was underway. However, when the ECB presented results of its strategy review in 2021 it remained silent on the aspects of its policy strategy that contributed to instability in the euro area before the pandemic.

Worse, on 24 March 2022, the ECB decided to return to the same destabilising framework that was in place before the pandemic. Once again, the ECB will rely on DBRS and other credit rating agencies for its monetary policy, in contrast to best practices followed by every other central bank. Once again, we can expect occasional avoidable crises in euro area sovereign markets. Once again, the people of most member states will be penalized with a high cost of financing of government debt, beyond what would be warranted by fundamentals. Once again, ECB policies will promote economic divergence in the euro area, contrary to the ECB mandate.

For all us who care about the success of the European Project, this should be a cause for concern. The topic of the conference is rebuilding social capital, how we can do better. On 24 March 2022, the ECB took a step backward that I hope, will be soon corrected.

> Let me end by recalling Jean Monnet's famous remark: "Europe will be forged in crises, and will be the sum of the solutions adopted for those crises". Indeed, before the founding of the ECB, Europe progressed after every crisis in the manner envisioned by Monnet. This is not the experience we have had, unfortunately, since the creation of the ECB. The euro crisis was a decade that took us backwards in Europe.

In accordance with its mandate and to rebuild social capital in Europe, it is very important for the ECB to draw on good decisions it has taken in the past that contribute to stability and rebuild cohesion. Policies that cause unnecessary instability must be discarded. For Europe to succeed, the ECB must become part of the solution of Europe's crises.

[7] Moore, Elaine, "Portugal escapes junk rating from DBRS, but what now?" *Financial Times*, 24 October 2016. https://www.ft.com/content/121a446a-97b4-11e6-a80e-bcd69f323a8b.

# Claudio Borio[8]

## Head of the Monetary and Economic Department, Bank for International Settlements

Claudio Borio, Head of the Monetary and Economic Department, Bank for International Settlements

Thank you very much. Thank you for inviting me here to celebrate the 175th anniversary, no less, of your central bank.

As we know, this conference is about rebuilding social capital and the role of central banks in that context.

I would like to address just one key aspect in the bigger picture, which has concerned me for some time. That is, and going back to something that we heard before from Harold, a kind of "expectations gap" between what central banks are expected to deliver and what they can actually deliver. This of course, can complicate the fulfilment of their mandate and has the potential – let me stress, the potential – of ultimately raising questions about the legitimacy of central banks in the eyes of the public and therefore also of undermining their precious autonomy. I prefer the term "autonomy" to independence, which is so useful to central banks to fulfil that mandate.

[8] Based on the transcript of the intervention.

I think the challenge in this context is how to strengthen this implicit social contract between the central bank and society by trying to narrow that gap. Let me highlight three instances of what I call “exaggerated expectations”.

For the first, let me choose a rather obscure corner of policy, ie macroprudential policy – a task for which central banks everywhere in one way or the other are co-responsible. By now, I think we are all familiar with what macroprudential policy is. If you like, it's the new kid on the block, a policy implemented post-Great Financial Crisis to promote financial stability more effectively.

By the way, this is a policy advocated by the BIS from at least the early 2000s. The basic idea, just to remind everyone, is to complement the longstanding focus of prudential regulation and supervision on individual financial institutions, taken on a standalone basis, with one that sees them as part of the financial system as a whole, so that the focus is on systemic risk.

A key task in that context – not the only one, but a key task – is to tackle what one might call the “domestic financial cycle”. That is outsized expansions and contractions in credit, in asset prices, particularly property prices, and in risk taking, that are at the core of much of the financial instability and big economic damage that we have seen.

In the financially liberalised world we live in, the domestic financial cycle tends to be fuelled by the procyclical behaviour of global financial conditions – what has sometimes been called the “global financial cycle”. These are two different concepts, especially relevant, of course, for emerging market economies.

This task, the task of macroprudential policy, has become so important as a result of a subtle but very important change in the nature of the business cycle since the mid-1980s. From what I would call inflation-induced to financial cycle-induced recessions.

What do I mean by that? Well, until the mid-1980s, recessions were caused by inflation going up and monetary policy tightening with little changes in indicators of the financial cycle. Since then, by contrast, and COVID-19 recession aside, inflation has been stable until recently – I'll come back to that – and so there was no need for monetary policy tightening. What caused recessions were outsized financial expansions turning into contractions. The Great Financial Crisis is, I think, the clearest example of that.

The problem is that macroprudential policy has often been regarded as *the* answer to these phenomena, to the financial cycles, including – and this is the key – in communication. In fact, macroprudential policy is only part of the answer. One piece of evidence for that is that even in countries in which macroprudential policy has been used very, very aggressively – mainly in emerging market economies – we have still seen the emergence of the kind of financial imbalances that tend to generate the problems I described earlier.

As a result of these exaggerated expectations, other policies have not played their part. I would like to highlight fiscal policy, which, after all, is the cornerstone of financial stability. Now public debt levels are the highest in history.

But also, I would argue, monetary policy. Monetary policy was very effective in picking up the pieces when things broke – in a way, it was *too* effective in some respects, as its success would encourage the repeated use in that context – but did little to constrain the build-up of financial imbalances.

Partly as a result – and this is only one of the reasons, of course – we have seen interest rates (nominal and real) as low as they have never been in history. And partly as a result – again, this is only one reason – we have seen private debt levels which have reached historical highs.

The implication of all this is that financial instability has not been addressed particularly effectively; more holistic macro financial stability frameworks, in which also fiscal and monetary policy would play a role, have not yet been put in place; and if something goes wrong, of course, central banks will be blamed.

> This brings me to the second instance of what I would call exaggerated expectations. That is the view that central banks could fine tune inflation as it drifted stubbornly below target. In some cases, less than half a percentage point.

And this at a time when inflation had arguably reached what Volcker and then Greenspan would define as price stability, i.e. a situation, a condition, in which inflation does not affect the behaviour of economic agents.

I think the problem here is that I'm not sure the public ever understood the reasons for trying so hard to push inflation up. The public likes price stability and dislikes inflation, and this has created a certain tension that is rather difficult to manage.

This strategy has not been inconsequential. We know that exceptionally low real interest rates and nominal interest rates are now complicating the task of dealing with the unexpected increase in inflationary pressures.

> This brings me to the third instance, which is the broadening of policy considerations in the pursuit of central bank objectives. This is something that Harold also mentioned. It happened either as a result of formal changes in the mandates (for example, the addition of employment) or, indeed, of less formal extensions and interpretations of the mandates, in which distributional considerations have become more important, even environmental ones.

Of course, this broadening reflects political and social priorities and therefore pressures on central banks as entities of the state. My concern is that this raises the risk of disappointment, again complicating the task of central banks. In this context, think of the recent fight against inflation that will inevitably require unpopular decisions, which might be seen in contrast with those objectives.

Let me conclude, by reiterating the point that there is a need to try to narrow this expectations gap between what central banks can achieve, can deliver, and what they are expected to deliver.

This is a very tricky issue, very difficult.

Depending on how we approach the question, on your view about how the economy works, you may come up with different answers. You may wish to have a very narrow role for central banks. Harold, you mentioned payments and settlements systems, which is the very, very core of central banking functions. If you go back in history, even before crisis management, that was the key reason for the creation of central banks.

Personally, I would focus more generally on monetary and financial stability as being the core aspects of central banking through history, in addition to payments. You can think of payments as a precondition for these functions.

But I think this has to be complemented with two important additional aspects, regardless of what you think the role of a central bank should be. One is a keen recognition of what central banks can do on their own -- be that with respect to financial stability, price stability or macro stability more generally. And consistent with that, I would say clear communication, to manage expectations of both policymakers and the public.

Let me stop here.

# Lucrezia Reichlin[9]

## Professor, London Business School


Lucrezia Reichlin, Professor, London Business School

Thank you, Pedro for this invitation. It is a pleasure be in Lisbon and it is a pleasure to participate in a conference with such an unusual title.

It took me some time to understand what I was supposed to say and how to relate central banks to social capital. What do central banks have to do with social capital? Starting from this question "What is social capital?" It is what develop relationships among people that live and work in a particular society, in such a way as to enable the society to function effectively.

This is about norms. Douglass North would have said that this is about the "rules of the game": formal and informal institutions, which are enabled by trust.

> Therefore, it seems to me that the role of central banks in contributing to social capital must be linked to the level of trust that citizens have in them. I think that was also the line

[9] Based on the transcript of the intervention.

> that Harold took this morning. I want to emphasize that this trust must be related to their ability to deliver and to their credibility.

That is my first point.

Going beyond that, one has to reflect on the fact that central banks are part of government and therefore their credibility is intimately related to the credibility of the government as a whole.

That credibility in turn depends on the overall government capacity of implementing policies which are effective and perceived as fair. And it is not only effectiveness that matters, but also the perception of fairness of these policies. Both the ability of achieving the stability of the currency and the safety of government debt, matter for effectiveness and fairness.

The stability of the currency is linked to the credibility of the issuer. As we all know, in a fiat money system that is all we need. Likewise, the safety premium enjoyed by credible governments allow financing of government debt at a real rate which can be below the real growth of the economy, even for a long time, as we have experienced in the last decades.

Credibility allows government to enjoy seigniorage as a special privilege. It is very important to understand what are the circumstances under which the government as a whole can keep this privilege. It is quite clear from history that seignorage privilege and credibility of government and central banks are intimately related.

Since here we are in Lisbon, it is unavoidable for me to talk about the Eurozone as a special case. With one monetary authority and 19 fiscal jurisdictions, thinking about the joint credibility of governments and the central bank is difficult because congruence between the policies of both agencies is a more difficult goal to achieve than in a unitary system. The relationship between the central bank and the 19 government is a very complex one. But it remains fundamentally true that, even in a monetary union, the credibility of the central bank cannot be disentangled from the credibility of governments.

> The implication is that the role of the ECB in building social capital cannot be disjointed from the ability of the fiscal authorities and the monetary authority to deliver collectively.

And this will be my second point.

Delivering collectively is not easy, as we have experienced in multiple crises. Athanasios already talked about the difference between how we collectively dealt with the debt crisis and how we dealt with the COVID-19 crisis.

It is clear that during the debt crisis, the monetary and fiscal authorities have been engaged in a “game of chicken”, the central bank being the “only game in town”. Clearly, in the EU, we are in a very fragile arrangement. True, we did better with COVID-19 crisis. A key reason was indeed the implicit coordination between monetary and fiscal policy, which we lacked during the debt crisis.

At the risk of saying something politically incorrect, I would define the kind of coordination that we experienced with the response to Covid, as managed monetization. That is, massive fiscal expansion supported by ECB purchases.

In that occasion, the ECB has acted at the same time to pursue a monetary policy objective and a financial stability objective by using several instruments. QE was used for monetary policy purposes and to provide liquidity in those segments of the markets which had become dysfunctional.

> As a result, in that occasion the ECB credibility was boosted, social trust was kind of protected and so on.
> But how confident are we that this will work next time? Should we rethink the pillars of the governance of the EU, so that we can make sure that in the next crisis – and we are already in the next crisis - this kind of coordination is going to be implemented? This is the key question we need to ask when thinking about the role of the ECB in rebuilding social capital and protecting social capital going forward.

That is my third point.

Evidence suggests that in order to be effective, both fiscal and monetary authorities have to stretch existing rules as defined by a narrow interpretation of the Maastricht Treaty. This was the right thing to do, but it is pushing us in a very fragile equilibrium. Things may go wrong because the rules are not that clear anymore. So, the question is really how stretched are those rules? Do they need to be reinterpreted or radically changed? The question is open, but we cannot put it under the carpet any longer.

Where do we come from? If we take the historical experience, and Harold talked about it earlier, after the experience of the great inflation of the seventies, central banks regained the lost credibility by embracing inflation targeting, and narrow central banking. Associated with that, the best practice became to grant them operational, and sometimes, as in the case of the ECB, financial independence. The design of the ECB is the child of that consensus.

Now, after 15 years of multiple crises, this has been challenged. I think there is no doubt that that concept is not fit for purpose anymore. Central banks mandates have become broader, monitoring fiscal interactions become more visible. Distributional consequences of monetary policy as well as financial stability Implications have become a source of concern. And today central banks are called to do many things, financing government directly or indirectly, act as market makers, pursue green asset purchases, and to consider issuing digital currency by potentially acquiring direct control of credit allocation.

Central banks are now doing this on a routine basis and with multiple instruments. So, the question I asked before has to be on the table: do we have the framework to support this broader remit of the central banks?

Of course, discussing this goes beyond the specific questions of this panel. But the point that I really want to forcefully make is that central banks do not act in a vacuum. So, in reflecting on their role, we should reflect about the governance issues as a whole.

> I want to mention three directions of reflection, which must be discussed in the central bank community.

Since I just have one minute, I will just outline them and then maybe I will come back to that in the discussion.

First of all, we have to develop a framework for managing central bank risk. With large balance sheets, a broad set of instruments and large role in the market, it is very important to clarify the rules for policy in the new framework. I would say that the rules under which the ECB operates are ambiguous. We need more clarity to protect what we want to protect. I will return to that on the debate if there is occasion.

The second thing that we need is to develop a framework to facilitate monetary and fiscal coordination. The concept of independence in which there is an absolute "Chinese wall" between the fiscal and monetary authority is not fit for purpose anymore.

The last thing is that we need to develop a better framework to deal with multiple objectives: monetary policy, financial stability or others. We could link it to an interpretation of the flexible inflation-targeting framework. In a recent CEPR report with various co-authors, we propose to deal with trade-offs between multiple objectives by relating the length of the temporal horizon of the inflation target with the cost of the instrument in terms of secondary objective (higher cost, longer horizon and viceversa).

Now, I think this is very relevant today. There are new risk looming with the Ukrainian war and the framework will be tested again. The emphasis of this panel is financial stability but, actually, the new issue will be how to deal with stagflationary type of shocks and all the things that I have said are relevant for these particular problem.

First of all, secondary objective. How do we deal with inflation, output/employment trade off? Second, how do we coordinate with fiscal policy? This is likely a supply shock, and in that sense the situation in Europe is very different than in the US , in my view. So, we need the fiscal tool to get into the cracks, and we need coordination. We are likely to face increasing government debt as consequence of the war. The central bank will be called to do some kind of government financing. So, in that sense, the provisions of the Treaty - no bailout, no monetary financing, proportionality - need to be interpreted with more clarity.

Thank you.

# Pablo Hernández de Cos[10]

## Governor, Banco de España

Pablo Hernández de Cos, Governor, Banco de España

Thank you very much Pedro. Thank you, Mario for the invitation.

And congratulations to all the staff of the Banco de Portugal for this commemoration. The Banco de Portugal has indeed built an excellent reputation among the central bank community over all these years. It is surely a good starting point for the Banco de Portugal to rebuild social capital here in Portugal.

As Lucrezia said, the topic of the conference — the role of central banks in building social capital — is a rather complex question. I will try to simplify it a bit, perhaps too much. I will approach the topic from one angle, which is related to the reason for the specific institutional setting that we, central banks or supervisors in general, have as compared to other public authorities, which is essentially one of independence, or autonomy, if you prefer. It is interesting to go back to the original reason why we want central banks and supervisors to be independent. This is based on the evidence that we have on the determinants of long-term growth, which points to the importance of the quality of institutions.

[10] Based on the transcript of the intervention.

Good quality of institutions is important in particular to allow long-term considerations to be incorporated into the decision-making process. This is, for me, the most relevant argument justifying independence of central banks. Independence should allow us to incorporate into our decision-making elements that are relevant for the welfare of citizens in the long run. It is much more difficult for politicians to do this, basically because, of course, they incorporate the political cycle into their decision-making.

But, if this is the case, then the legitimacy of central bank´s independence is essentially based on utilitarian grounds, in the sense that we think, with this independence, we are in a better position to deliver on our mandate.

> The key is how can we invest in this legitimacy in a better way. Probably the best way to do so is to connect this need for delivering on our mandates to the controls, the transparency and the accountability that always needed to go hand in hand with independence.

Relate to the efficacy in delivering on our mandates, one thing that probably we have not done enough, and I will give an example of what the Basel Committee is doing, is to evaluate what we do, and in particular evaluating our own capacity to deliver.

Something that central banks do very often is to emphasise the need for the evaluation of other public authorities. But it is not always the case that we do this with our own mandate. Of course, we have to take into account that when evaluating it is difficult to construct the counterfactual. It is very complex, and of course, a social science such as economics is not always ready to give a definitive answer. This is why central banks should, in parallel, incorporate this evaluation into their own decision making, investing in research, which is something that we have done traditionally.

There is an additional element that I think is important. We know that citizens very often do not understand what we are doing. It will also be very difficult for them to understand the results of our evaluation. This is why we should also invest in financial literacy and financial education. This is something that we are doing more and more.

So let me focus just for a few minutes on what the Basel Committee is doing. As you know, the Basel Committee is the global standard setter for the prudential regulation of banks and our main objective is to enhance global financial stability.

When I was appointed chair of the Basel Committee three years ago, I was very positively surprised to find that the Basel Committee has a permanent evaluation programme of its own activities.

In fact, now, we have two branches of this evaluation that are running in parallel. The first one is on whether the whole of the regulatory reform agenda that was approved after the global financial crisis is working as intended. The second, a decision that we took in 2020, is basically to see whether the COVID-19 crisis has also taught us anything in terms of whether the standards that we had approved are working as intended.

So, let me share with you some of the results of this evaluation. We have already published a preliminary report last year. We are now in the process of updating this report and most likely during the summer or at the end of the year we will be ready to publish more definitive results. But there are findings that are already in the paper that was published last year that are interesting.

First, we know, and it was explicitly evidenced in the paper, that the reforms at least provided for a financial system that was more resilient than at the beginning of the financial crisis. Banks were better capitalised, better funded, and this was done globally. It was not only done by some jurisdictions rather than others but banks were more resilient globally.

It is also true that banks have continued to lend to households and businesses during the COVID-19 crisis, which is a very important difference as compared to what happened in the previous crisis. Even today, if you look at the solvency and liquidity ratios of banks, they are still very high, much higher than before the global financial crisis.

Of course, disentangling whether the effects of this increase in resilience were basically the consequence of our reforms or the consequence of the fact that in this crisis, as Athanasios was emphasising, monetary and fiscal policy were very active, is very difficult. There has been extraordinary support for households and firms. But this disentangling is done, or is at least attempted in this paper, and the pieces of evidence that are provided in it point precisely to the importance of the financial reform.

Let me give you some results that in my opinion are relevant: i) we find that banks with higher capital ratios suffered less in terms of, for example, increases in CDS spreads; ii) we also find that strongly capitalised banks showed greater increases in lending than other banks, and, iii) a third result is that the uptake of the public support measures was higher precisely in those banks that had higher capital ratios.

The interesting thing about this evaluation is that at the same time there might be some lessons to learn. We are already highlighting some pieces of the regulatory reform that might not be working as intended and let me focus on one issue on which Claudio has also worked in depth in recent years, which is to understand whether capital and liquidity buffers are usable as envisaged. We wanted banks to have higher levels of capital precisely to be used in a situation of crisis. So, if in the end we observe that this capital is not being used, there is a problem, and we might need to modify some parts of the legislation.

The evidence is that banks might have been hesitant to use the regulatory capital buffers had it been deemed necessary in practice. The empirical evidence that has been produced by the Committee indicates that, in fact, banks with less capital headroom, and here the key word is "headroom", tended to lend less during the pandemic.

There was also a relatively larger decline in average risk weights at banks with less capital headroom, perhaps because of an attempt to defend capital ratios, and importantly also, the buffer threshold appears to have been the constraint, forcing banks to adjust their behaviour as lower capital ratios alone did not drive the results. Finally, another interesting finding is that the issue was not only one of quantity but also about prices. Banks' proximity to buffers appears to have affected the cost of lending.

The reasons behind this problem are unclear. It may have occurred because the level of uncertainty was very high for banks, and they were foreseeing that there might be losses in the future, and thus wanted to keep these buffers so they could be used to cover those losses. That is one possibility.  The lack of formal guidance by supervisors on the rebuilding of these buffers might be another issue. Low profitability may also be a reason for this result or market stigma. We are now in the process of trying to understand precisely the origin of this problem. Closely related to this and a very important issue is the question of releasable buffers. In the Basel framework there are some buffers, in particular the countercyclical buffer, that are intended to be activated in boom periods, precisely in order to make banks more resilient, and to be deactivated during recessions.

Here the analysis of the Basel Committee suggests that the release of such buffers had a positive effect on lending during the pandemic. The results, for example, specifically for the euro area, for which we had more microdata, suggest that banks are adjusting internal capital targets cyclically: in boom periods banks reduce their own internal capital targets, and they do the opposite when there is a recession.

The evidence also points to the fact that macroprudential authorities have the ability to influence these internal capital targets by releasing or activating the CCyB (Countercyclical Capital Buffer). This is precisely why the evidence points to the fact that the release of the capital buffer also generated a reduction in banks' internal capital targets and this ultimately allowed them to provide more credit to the economy.

If I combine all this information, the one thing that is clear to me now, which I think we need to think more about it in the next stage, is that we need to consider whether there is sufficient releasable capital in the system.

Let me give two very concrete examples of why I think this is necessary. The best example is the COVID-19 crisis.

In many jurisdictions,  we were observing the emergence of systemic risk in the economy before the crisis, and that is why many public macroprudential authorities decided to activate the CCyB. Then a completely exogenous crisis arose – the COVID-19 crisis – and macroprudential authorities decided to release the CCyB. We may now be in a situation in which there is systemic risk because, for example, housing dynamics are very exuberant in many jurisdictions, but the capital may not be there.

And of course, the opposite is also true. There were other countries, for example, Spain, in which we did not observe any increase in systemic risk before the COVID-19 crisis. So the CCyB had not been activated.  At the beginning of the COVID-19 crisis, we did not have any room for manoeuvre to activate the CCyB because it had not been activated previously.

> The conclusion that we may need to work on increasing releasable capital, and that there may be different options to do this is an important one.

I have other comments, Pedro, but in view of the time, I can stop here.

# Panel 1 – Discussion[11]

[Pedro Duarte Neves]: Thank you very much, Pablo, for bringing financial literacy again for the debate – as it is an important element of social capital – as well as the idea of the assessment of our own measures for an accountability purpose. I will run now a short round of questions to the panel, and, after that, I will open to the public. So, please prepare your questions.

I will group questions in two. I will start by Lucrezia and Athanasios, by that order if you don't mind. You have just expressed your views on the recent strategy review of the ECB: you Lucrezia on the CEPR report, and you Athanasios on the report for ECON, where you express your views on the interaction between monetary and fiscal policy.

Today I would like to expand a bit on the interactions between monetary and financial stability, if you want, by having your views on monetary policy and financial stability interactions conditional on fiscal. As Claudio just reminded us, business cycles and financial cycles do not coincide. In your views, how should monetary policy incorporate financial stability considerations, in particular in a situation in which – in spite of all the progress on macroprudential policy – the macroprudential framework is still incomplete.

Probably Lucrezia could bring the view for Europe and you Athanasios for the US. Someone mentioned that public debts are very high, particularly in the US, which I think reaches 125%. So, Lucrezia first, in 2-3 minutes please.

[Lucrezia Reichlin]: Well, the obvious answer, the standard answer, it is that with both monetary policy and financial stability objectives, the central bank needs more than one instrument. Macroprudential policy provides extra instruments for extra objectives. But I think that the answer to that question, and in line with what I said before, will have to be in providing an appropriate policy mix involving bank capital, the housing market, the development of capital market, and knowing that these policies have fiscal implications.

My point is that central banks do not operate in a backroom. Luckily, they now have many instruments. I therefore think that it should be possible to use them to pursue more than one objective.

A different question is: if you have more than one instrument but a primary objective - price stability - how do we account for the cost of pursuing a secondary objective when the instruments are costly and we are facing tradeoffs.

Indeed, in the CEPR report we have a discussion about this point and we sketched the general idea. The policy instruments that achieve price stability can have costs or benefits, in terms of secondary objectives. If there are costs, this would justify a longer horizon for the price stability objective. If there are benefits, a shorter horizon. This may be relevant today where central banks are facing an employment inflation trade-off. According to our logic, the central bank should define a longer horizon to reach the price stability objective or more flexibility in tolerating inflation above target in order to avoid excessive output volatility.

[11] Based on the transcript of the discussion.

[Pedro Duarte Neves]: That is a very good message. Now, Athanasios.

[Athanasios Orphanides]: Thank you for the opportunity. So let me let me start by saying that, of course, central banking is about stability, starting with price stability, and then after that financial stability, and economic stability, they go together. As Lucrezia pointed out, we do have multiple tools. The question is whether we activate those tools in the best way to achieve all of the mandates simultaneously. And I have to say, if I compare the United States with the Euro area - since you invited me to do that - in the Euro area we have better tools for macroprudential regulation than in the United States. So, in that sense, the Euro area is in a better place to advance both monetary policy objectives and financial stability objectives.

One recommendation I would make - since we are pursuing the model of suggesting improvements. The ESRB was created before the ECB actually became the supervisor through the SSM. In my view, it would be useful, in the context of the Euro area in particular, to revisit the authority the ESRB has to implement macroprudential policies in the Euro area as a whole. ESRB recommendations would need to be implemented, unless there is an explanation to the contrary by member states. That's not the case right now. The ESRB is there, as an institution, but it does not have the authority that I think would be best suited to promote macroprudential policy, financial stability in the euro area, on top of what is delivering with respect to price stability.

Now, to your question, and this is touching on Claudio's question and reasoning as well, is monetary policy, interest rate policy, the first tool to go to for promoting financial stability? My answer to that is definitely no. The first tools would be macroprudential tools, and we can make much better use of those than we have been making in the past. The history of trying to improve financial stability using monetary policy tools and having monetary policy deviate from delivering price stability and growth, actually is a mixed bag. We have episodes where central banks did a lot of damage to the economy and did not improve financial stability when they tried to use monetary policy instruments, thinking that they would improve financial stability.

So, I think that - as a rule of thumb - it's best for central banks, like for the ECB, to focus first and foremost on price stability, I agree with all who made this point. But then - subject to that - the second element that I would have, is that the ECB should do what it can in order to enhance financial stability without compromising price stability. And there is a lot of improvement that can be done on that part from the ECB, so that easing policies are not themselves inviting financial instability in the Euro area. I gave you an example earlier in my remarks, and there are other examples as well. I think this is where the emphasis should be for addressing this question.

[Pedro Duarte Neves]: Thank you very much for very clear answer. Now, I move to Pablo and Claudio, by this order. Financial reforms were decisive to rebuild social capital. What is it really missing in the macroprudential framework? And how do we see the delay, for instance, in the Basel III finalisation? That is what I will ask to Pablo. For you, Claudio, we know that crisis come from very high levels of debt. How do you see corporate debt in Europe or in the world in general? Having in mind, for instance, that just two days ago, Andrea Enria and Sam Woods, the deputy governor of the Bank of England, wrote a letter saying that there was excessive risk taking in leveraged markets. I will start by you Pablo.

[Pablo Hernández de Cos]: On the macroprudential domain, in Europe we are in the process of revising the macroprudential framework that was initially incorporated into the legislation. In the discussion that we have had, precisely on the ESRB, that Athanasios was mentioning, there are three lessons to be drawn that might require changes in the legislation. The first one is the need to incorporate borrower-based measures, not only capital instruments. Precisely in Portugal you have been very active with these instruments and the evidence that we have is that they can be very useful to complement capital-based measures.

The second is precisely the comment that I was making in my initial intervention, the fact that we need more releasable capital. And the third that we might also need some macroprudential instruments for the non-banking sector because the importance of the non-banking sector is increasing by the day. There are some risks associated with this development of the non-banking sector. So, we also need instruments to be activated in the event of exuberance.

On Basel III –G20 leaders have committed to full, timely and consistent implementation. The fact is that there are delays already, including here in Europe, but also in other jurisdictions.

It is interesting to note that recent model-based evidence provided by the ECB shows the benefits of full implementation, and a timely implementation. This is because from these models, we can anticipate that the impact on the long-term growth of our economies will be very significant precisely through the higher resilience that Basel III may provide our banks with. And interestingly enough, from these models the simulations also show that if there is a dilution of the agreement, these benefits will be much lower or may even disappear. So I hope that this evidence helps legislators to move in the right direction in this domain.

[Pedro Duarte Neves]: Thank you, Claudio it is now your turn, and then we go for the floor.

[Claudio Borio]: Well, first of all, an act of humility here. I guess many of you know this saying by Yogi Berra that it's very tough to make predictions, especially about the future. And at the BIS we clearly got one prediction wrong. We thought that the Covid crisis would first have a liquidity element to it – a liquidity crisis – and that then it would morph into more of a solvency or bankruptcy crisis, as a result of the Great Reallocation and so on. In fact, we got it wrong. And so we've been looking back to understand why. One reason was that there was a lot of pent-up demand which came up very quickly. And the other, of course, was the policy response – a huge and concerted policy response. It was huge on the fiscal side, on the monetary policy side, and indeed on the regulatory side, with a strong macroprudential perspective. This meant that the economy actually did quite well.

Going back to what I was saying before, it also meant, however, that the financial cycle and the vulnerabilities that were already there continued to build up. What's happening to house prices around the world is a typical example. The other thing is that, as you mentioned and as I mentioned in my previous intervention, the levels of debt globally – not just public debt, but private debt – are at historical highs, and this also applies to corporate debt.

So, the question going forward is what might happen now. I'm not going to make any predictions, but I will definitely say that significant risks have been building up. There has been a lot of aggressive risk-taking in the corporate sector – linked to very, very low interest rates – and that it has continued – despite the COVID-19 crisis and even despite the crisis in the Ukraine. If you look at corporate spreads, they're quite narrow by historical standards. And this is what has basically led the supervisory authorities – Andrea Enria and also the Bank of England – to highlight the need to have a more cautious response.

Now, the good news is that, as Pablo also mentioned, a lot has been done to improve the capitalisation of the banks. So, they are in better shape than they would otherwise be. The piece of less good news is that very little has been done for the non-bank financial sector, and for capital markets in general. And we saw what happened in March 2020. Of course, part of this was intended, ie shifting the risk outside the banking sector. But regulation in that sector has been lagging. Bottom line: let's not let our guard down. There are risks, they have been building up and it will be important to try to deal with them as effectively as possible.

[Pedro Duarte Neves]: Right. My question wasn't for a prediction, but for an assessment of risks, which you have done very clearly. Now, questions from the audience. We will collect them in one round. There is already one question, two, I mean three. So there are three interventions. We are somewhat short of time, so Vitor Constâncio first, we limit this round for these three questions. Please identify the addressee if there is a specific question.

[Question from the audience – Vítor Constâncio]: My questions are to Lucrezia and to Claudio. To Lucrezia, the first question is: everything that you said in this context led me to the interpretation that you consider that the objectives for the ECB - as defined in the Treaty - are too narrow nowadays. As you know, the economies and the financial systems have evolved and other considerations are needed, if my interpretation is correct.

Then I wanted to give you the opportunity to address two of the three points with which you ended your intervention. In particular in what regards the terms of cooperation of monetary and fiscal policy - that you've said the situation has changed and that sort of cooperation is needed - in what terms and what would have to be changed to make that possible. And, regarding the question of the secondary objectives, that you also mentioned that it was necessary to clarify: do you mean that it would be in any way helpful to have a sort of prioritising of those secondary objectives, or you were thinking about something else.

To Claudio very briefly, you mentioned the expectations gap, which is a reality. But the gap may come from the expectations being sometimes too wild and not related with the exact functions of central banks. Or, if the gap comes also from the fact that the central banks have difficulties in delivering their own core objectives today. If that is a reflection of the state of monetary theory, which continues to say coming from the new Keynesian models, that you move interest rates short or medium term with QE and, you know, all the equilibrium come intertemporal everything, because the response of consumption and investment is very effective to those rules of interest rates. Do you believe that? Or, do you think that the gap comes only from the expectations side?

[Pedro Duarte Neves]: Thank you very much. Let us collect the other two questions, please. I would ask for a one-minute questions.

[Question from the audience – Nuno Amado]: Very, very briefly. It's a different topic. It was mentioned by Professor Harold that there is obviously an increasing nonregulated sector, and regulated sector: is a dual world. So basically this dual world, we have a very strongly regulated, very strongly supervised and at the same time, we have a larger not regulated one. It was also mentioned - if I understood - that if there is a crisis, probably will come from the nonregulated. If there is a crisis on this nonregulated, probably not only capital will be lost, but social capital will be lost and a little bit of less trust on the Central Banks and the legislators that have done a very good job in the last years at least the central banks that have done a very good job. So this issue is not of concern to have a more balanced world and with less risk for the future of social capital destruction.

[Pedro Duarte Neves]: Thank you very much. Third question.

[Question from the audience – Ignacio Alvarez-Rendueles]: Good morning. My name is Ignacio Alvarez-Rendueles and I am working at one of the Portuguese banks and in connection with the comments of Governor Hernandéz de Cos where he mentioned the insufficient evaluation and knowledge among the general public of what central banks do. I would like to ask him, in particular as head of the BIS and with understanding of the several jurisdictions, if there is any particular jurisdiction where that shortcoming is less so and it's a model.

And I would like to go one step beyond and say that apart from the general public, whether there is any jurisdiction where, Central Bank or the supervisory authority benefits from, let's say, feedback survey from the supervised entities, which I think we live in a world where every time we do anything, we get back a call and we are asking about the interaction in a constructive way of obviously. You know, so I wanted to ask if there's any market where that trend, which is more applicable to the private sector, is also happening in the world of the supervised banks.

[Pedro Duarte Neves]: Okay, thank you very much. Just the last question for Nuno Fernandes, Nuno, you have to be brief, right?

[Question from the audience – Nuno Fernandes]: I'll be very brief. My question is for Pablo. I have very much enjoyed your analysis of how to sustain the independence of central banks and the need to reinforce the evaluation and the controls to guarantee that same independence. And so, that's related to the governance of central banks, and my question here is, really, how did you guarantee the independence of the evaluation that you shared with us?

[Pedro Duarte Neves]: Terrific. Thank you very much. So we'll go by the four panellists, and we'll start by Lucrezia, possibly. And then Claudio, there was a specific question for them, then Pablo as well, and then Athanasios, you will conclude from Boston. I will just ask two minutes, if possible, each because we are already getting in panel 2 time, and that is not good for social capital.

[Lucrezia Reichlin): Vítor, thank you for the question. I use this term narrow central banking. By narrow central banking, I mean the traditional inflation targeting framework, "phase one inflation targeting" we can call it. Now we are in a very different context, especially because we have large balance sheets, and we have multiple instruments and a broader role of the central bank as market maker and liquidity provider. A question is whether we will go back to the old framework or these changes are here to stay.

My view is that we will not go back, and for many reasons. First of all, because what we have learned is that financial markets are very fragile and that frictions are much more pervasive than we thought. Therefore, intervention with these new instruments - to attack the spreads, control the entire yield curve and so on - are actually quite effective. There is a discussion on how effective they are for macroeconomic stability but we know they are effective in preserving the stability of the financial system. An additional open question is whether structural factors will continue to push the economy towards the zero lower bound. We cannot rule out that possibility. If I am right, the key question is how we manage the balance sheet risk and the volatility of central banks' net income.

I also think is important to address the issue of central bank capital and this is not discussed, especially in the Euro area, because it's damn difficult to discuss as it opens the questions of how are we really sharing risk in the Euro system. So,we are sitting on "constructive ambiguity". This has served us well up to now, but, you know, with this level of government debt and this large balance sheet, the fiscal footprint of central banks is quite large. Not to address those questions and to have clear rules ex-ante, can undermine credibility. Remember what I said about the social capital of the central banks in my introductory remarks. A good example to illustrate my point is the SMP programme implemented in 2010. That programme did not work because it was not clear where the government was supporting it. The OMT announcement, on the other hand, worked because the government authorities supported it. This illustrates the point of capital and risk sharing or, in other words, the government backing to central bank's policy.

On monetary-fiscal coordination, I think that the vision of independence in which the ECB cannot sit at the table with the fiscal authorities because this is violation of independence, it's actually bonkers. I think that we need fiscal coordination. We had it during COVID-19, and this is why we have been successful. Will we have it again? I think that's a question mark. Right? In the new context of the Ukraine war, we better think about rules that will facilitate that.

And then there is the issues of other things which are important in the Treaty. No monetary financing. What does it mean? Now that we have outright purchases in the toolbox, what is the interpretation? No bailout. What does this imply for collateral? What does this imply for financial assistance? So, how strict? I think this is quite ambiguous. No monetary financing. What does it mean? This is an extra requirement. A lot of central banks do not have that provision of no monetary financing. Independence and price stability mandate should be good enough. Proportionality? This is perhaps clearer now after the legal issues with Germany, but the better we clarify those issues, the more robust our framework will be. This is all about monetary-fiscal coordination.

[Pedro Duarte Neves): Thank you. Claudio.

[Claudio Borio]: Well, thanks, Vítor. This is an old debate. But let me start by asking: where do unrealistic expectations come from in general? Basically, from the belief that a particular objective can be achieved with the tools that you have and getting this assessment wrong. Regardless of the degree of sophistication – and you can have these debates at different levels of sophistication – the key question is: what do you believe is feasible and what do you believe is not? And what you believe is feasible or not feasible depends on how you think the economy works – the paradigm through which you look at the world.

That's why, for example, Athanasios and I have disagreed over the question of the role of monetary policy in the context of macro-financial stability. We have different views concerning how the economy works.

My personal view – and let me stress that whatever I said even before reflects personal views and not necessarily those of the BIS – my view has always been that since roughly the mid-1980s there has been a major change in the nature of the business cycle, from inflation-induced to financial-cycle induced recessions – because of financial liberalisation, because of the globalisation of the real economy, and because of changes in monetary policy regimes. We saw this fundamental change and we didn't adjust. We simply didn't adjust to it. We kept thinking that we were living through the Great Moderation which, in fact, to my mind was just a Great Illusion. Of course, you can legitimately argue with this – yes, no – but this is my interpretation. And this determines what I see as realistic and unrealistic in policymaking.

From an analytical perspective, I think that some of the issues that you've raised are indeed weaknesses of the analytical frameworks that people have been using.. Within that broad theme, there is the question of the role of the financial cycle and of the inherent instability in the financial sector and in the macro-economy. And, within that, there is the question of what monetary policy can and cannot do. I always felt that it was realistic for monetary policy to lean systematically against the financial cycle to improve economic outcomes, while Athanasios felt that it was unrealistic to expect it could work.

Something I think monetary policy cannot do for a number of reasons – and there is a recent research paper with colleagues on this – is to fine-tune inflation when it's very, very low. Trying hard means very low interest rates for very long, and hence a risk of contributing to financial imbalances and macroeconomic instability down the road. That is why I believe that there is an important role for monetary policy – not as the primary line of defence, but as one line of defence – in this broader macroeconomic picture – seeking to control inflation without due regard to the build-up of financial imbalances is not fully adequate.

But again, all depends very much on how you think the economy works. And I can easily see why Athanasios and Lucrezia and myself may be in a different position.

[Pedro Duarte Neves]: For Pablo two minutes as well.

[Pablo Hernández de Cos]: Let me first emphasise that I fully agree with the comment that was made by the third person who intervened. Most of the risks to financial stability now are firstly global and secondly cross sectoral. This means that the response to mitigate these risks should be global and should incorporate all the regulators that are relevant, which are in some cases not only in the financial sector, but should now include others that are in the non-financial sector.

On evaluation, the two institutions that were probably pioneering on this idea of incorporating a permanent evaluation of their own functions, even creating a kind of department internally, were the IMF and the Bank of England. We at the Banco de España are doing something similar now. The Governing Council of the Banco de España has to approve each year an annual programme of evaluations. We have already done one on communication, we will do this year one on our research, another on our forecasts, and one on some of our micro-supervisory responsibilities. And for these evaluations to be really independent, they have to be done externally. This is clear. They have to be reported adequately, particularly in our case, to the oversight body, which is our Governing Council. And of course, you need to communicate, you need to be transparent on the conclusions and the outcome of these evaluations.

[Pedro Duarte Neves]: Thank you. Athanasios, last thoughts from Boston.

[Athanasios Orphanides]: Thank you. Across the river from Cambridge, actually, I can see in Boston from here. Let me touch on two issues. First, the question by Vitor Constâncio. If the mandate is appropriate, would it help to be more focused on the secondary objectives and help set the priorities among these objectives. In my view, we must acknowledge how much progress was done with the ECB strategy review. For the first time, just last year, the ECB acknowledged that it is responsible for a number of other objectives in addition to price stability. That's very important. The way to think about priorities is from the perspective of the central bank. When I look at the long release of secondary objectives of the ECB, some of them are much more closely related to monetary policy than others.

The ECB could easily focus on the ones that are achievable with monetary policy. Let me give you an example. Among the secondary objectives of the ECB we have the protection of the environment, technological advance, and promoting social and economic cohesion. Among these three, only one of them really is truly economic and truly greatly influenced by monetary policy. And this is the promotion of economic and social cohesion, ensuring that there would not be a divergence between Euro area member states. So it would only be natural for the ECB to pay greater attention to that relative to, say, promoting technological advance by funding some technical university like MIT. By the way, you know we would appreciate the funding, but I don't think it's the ECB's job to do something like that.

So here I differ from Lucrezia. I think that the Treaty is wonderfully written. The ECB has the authority and has the tools to do much better than it has done on many occasions in the past.

I want to close by coming back to Claudio's comment about the BIS missed prediction in early 2020. I think the BIS prediction in 2020 - that the pandemic would cause a liquidity crisis, and from that point on a severe crisis - was absolutely correct, conditional on the ECB following the policies that it had followed the previous 10 years. This was an entirely reasonable prediction. To me this is something that gives me hope for Europe and hope for how the ECB can better promote social capital and financial stability in Europe. What ECB did in those two years showed how much good it can do by properly interpreting its mandate, properly using its authority and its tool within its powers for improving Europe. And let me end with this, thank you.

[Lucrezia Reichlin]: I say that the Maastricht Treaty has to be interpreted in a transparent way because, actually, we just wrote a paper with lawyers saying everything that you say can be done within the Maastricht Treaty, provided that interpretation is clear.

[Athanasios Orphanides]: Exactly. At least the ECB has the discretionary authority to provide the correct interpretation. That's exactly what I said.

[Pedro Duarte Neves]: I would say that's the perfect moment to close this panel. Please give your applause to the panel participants.

# Panel 2: Welfare considerations beyond price stability (employment; output growth; income distribution; climate change)


From left to right: Pedro Duarte Neves, Gabriel Makhlouf, Antonella Trigari, Jordi Galí and Juan J. Dolado

## Chair

- Pedro Duarte Neves, Banco de Portugal

## Speakers

- Antonella Trigari, Bocconi University
- Gabriel Makhlouf, Central Bank of Ireland
- Jordi Galí, CREI and Universitat Pompeu Fabra
- Juan J. Dolado, Universidad Carlos III de Madrid

# Panel 2: Welfare considerations beyond price stability (employment; output growth; income distribution; climate change)

Monetary and financial stability are key pillars of strong and sustainable growth. The distributional impacts of central bank actions have again become a key topic of debate. The inclusion of heterogeneity in New Keynesian models captures the influence on aggregate outcomes of individual differences within broad groups of economic agents.

- Monetary policy affects employment and wages in complex ways. The same monetary policy decision may have very differentiated impacts according to labour market status, educational level, skills, gender, age, household composition, income, and wealth. How does this heterogeneity affect the transmission of monetary policy? How do different indicators of labour 'slack' perform in capturing the interconnections between monetary policy and the labour market?

- Monetary policy choices – conventional or unconventional – affect income and wealth distributions, through channels like earnings in the labour market, net interest income, or asset prices. This may have unintended distributional effects across different labour market status and skills, between borrowers and creditors, between owners and non-owners, across different generations, and across different economic sectors. How do these distributional aspects affect the transmission of monetary policy?

- Monetary policy affects the probability of a crisis not only in the short term, through its usual effects on output and inflation, but also in the medium term, through its effects on savings and capital accumulation. From a welfare point of view, what is the right balance between inflation targeting, response to output fluctuations and systemic risk assessment?

- Climate change and biodiversity loss bring new challenges to monetary policy and the preservation of financial stability, with an impact on inflation, economic activity, financial institutions, and the functioning of the markets. How should central banks address the impact of climate change risks when designing monetary policy, in preserving financial stability, and in managing balance sheets?

# Introduction, Pedro Duarte Neves[12]

Banco de Portugal


From left to right: Pedro Duarte Neves, Gabriel Makhlouf, Antonella Trigari, Jordi Galí and Juan J. Dolado

The distributional impacts of central bank actions have again become a key topic of the debate on monetary policy. For introducing this session I would like to go back to a speech by Janet Yellen – then the Chair of the Board of Governors of the Federal Reserve System – in October 2016, where she provided some guidance on the fundamental policy questions that should be addressed by macroeconomic research. One of them is particularly relevant for this panel: [*and now I quote her*]

"My (second) question asks whether individual differences within broad groups of actors in the economy can influence aggregate economic outcomes – in particular, what effect does such heterogeneity have on aggregate demand?" [*and then she concluded*]

"… even though the tools of monetary policy are generally not well suited to achieve distributional objectives, it is important for policymakers to understand and monitor the effects of macroeconomic developments on different groups within society."

Macroeconomic research responded very swiftly to this challenge, through the inclusion of heterogeneity in New Keynesian models [HANK models]. These models are built on the idea that inequality and income risk matter for the business cycle and for long run effects. Heterogeneity provides a more appropriate identification of the monetary policy transmission mechanism.

[12] Based on the transcript of the intervention. The supporting presentation is available at: https://www.bportugal.pt/sites/default/files/pedro_duarte_neves.pdf.

In addition, the interaction between heterogeneity and other types of frictions – either financial frictions or labour market frictions – may result in varying effects of monetary policy, conditional on the underlying state of the economy.

The panel will address aspects like the following:

- How does heterogeneity in the labour market affect the transmission of monetary policy?
- How should be measured the 'slack' in the labour market?
- Under financial frictions, should a central bank deviate from its objective of price stability to promote financial stability?

and also

- Intergenerational economics (focus on climate change and inequality) and communication by Central Banks

To set the scene, this panel will start with an additional contribution on the role of Central Banks in sustaining social capital.

We are very lucky to have again 4 very distinguished participants on this panel: Antonella Trigari, Professor at Bocconi University; Gabriel Makhlouf, Governor of the Central Bank of Ireland; Jordi Gali, Professor at CREI, Universitat Pompeu Fabra, and at the Barcelona School of Economics; Juan Dolado, Professor at Universidade Carlos III de Madrid. We will start precisely by an intervention from Gabriel Makhlouf, who will have 10 minutes for his talk. Gabriel, hand it over to you.

# Gabriel Makhlouf[13]

## Governor, Central Bank of Ireland

Gabriel Makhlouf, Governor, Central Bank of Ireland

Thank you, Pedro, thank you Mário, for the invitation. Certainly, this museum is an extremely appropriate place to discuss today's topic. The relationship between money, individuals and human societies is, at the end of the day, at the core of what central banks are about, and in building or indeed rebuilding social capital. One of the advantages of speaking on the second panel is you had the benefit of listening to some excellent contributions from earlier speakers. I just wanted to note that – because some of what I was going to cover has already been covered – there will be a more comprehensive set of remarks of mine that will be published. I will skip over them as we talk.

Let me just start with actually the basics, which is what is social capital. Because there are many definitions, and they date back to Aristotle in some cases, ultimately it is about how people connect to one another. I like to think of it as the social connections, attitudes and norms that contribute to societal wellbeing, by promoting coordination and collaboration between people and groups in society. That sounds very nebulous for an audience of economists, and I will avoid discussing payoff matrices, dominant strategies, and game theoretic equilibrium just to make my point.

[13] Based on the transcript of the intervention. The speech, as prepared for delivery, it is available at: https://www.centralbank.ie/news/article/speech-gabriel-makhlouf-rebuilding-social-capital-the-role-of-central-banks-01-april-2022.

Social capital is essential to what we central banks do every day and why we do it. But let's go back to the beginning. I mean, we heard from Professor James earlier about the history of central banks, and he mentioned some. If we go back to the very beginning of the first central Bank, the Riksbank (the Swedish central bank), it also started really as a result of a crisis. I think one of the themes in the original central banks, whether it is the Banco de Portugal or the Bank of England or the Sveriges Riksbank, or even the Banque de France, is that there were particular objectives to avoid monetary disarray, if I can put it like that, whether it was to promote war, whether it was to deal with the crisis. I think the Banco de Portugal was actually set up at a point where the State was potentially on the edge of bankruptcy, as I understand it.

> Money is a symbol of stability and central banks play an important role in maintaining the stability, and history has shown us that it may be obvious, but it is worth saying that the stability of money plays a critical role in the stability of society. The role of money as a store of value, a unit of account and a medium of exchange, is an important instrument in how we as individuals and society connect with each other, whether through trade, commerce and our everyday connections, and hence in building social capital.

Certainly, in more recent history, the later wave of central banks, as Professor James was telling us, was created for slightly different reasons. I think at the end of the day they were still about promoting stability. As we chart the history of central banks, we can see their critical role in both providing monetary and financial stability (and I will discuss a little bit later some considerations beyond those two). One point which I would like to reiterate now is who central banks serve. It is an important anchor when thinking about our role, and since becoming governor of Central Bank of Ireland, a guiding principle for me has been a phrase from the original legislation, which established the bank nearly 80 years ago (we are much younger than the Banco de Portugal). We are much older than the ECB, and I think we should just bear that in mind; I might come back to that a bit later on.

Echoing the State's constitution, the original legislation that set up the Central Bank of Ireland said that our constant and predominant aim shall be the welfare of the people as a whole, and it is worth remembering that. Incidentally, that statement is not unique to the central Bank of Ireland. Social capital is ultimately about how we connect to each other, as I said, and it is clear that institutions matter for building social capital, and central banks, as important institutions of the State, play a critical role.

From my perspective, an important point I think we should bear in mind – and I think Lucrezia earlier was talking about it, maybe not as explicitly as I am about to – is central banks are part of an institutional ecosystem that is interconnected and, notwithstanding, that individual components of it may act independently or with autonomy.

I think it is important that we all, certainly from my perspective, need to avoid believing that we act in a vacuum, and we need to avoid confusing our independence with isolation. Central banks cannot afford to be isolated.

Douglass North defined institutions as the humanly devised constraints that structure political, economic, and social interactions. Economists from Adam Smith through Daron Acemoglu and James Robinson have explained the role the institutions have played in development and in progress.

This museum, incidentally, has a number of artefacts in it, I think, really tell the story of money as an institution and as a key instrument of building social capital. I will just reference Kuba Cloths, which are a form of money from the Congo in the 17th century. If you do a bit of research on those, and you understand how they were made (it was essentially by the whole community) and the role they played (it was always beyond money), it gives you a sense of money as social capital.

Last word on institutions (I could say quite a lot): I think Andy Haldane, the former Bank of England chief economist, said "whether old or new institutions seem to matter, their secret lies in solving societal problems of knowledge, coordination, and incentives". Institutional memory can help lengthen and strengthen otherwise short and subjective minds. An institutional investment can help build public goods and flatten otherwise fat tails.

The central banks are important institutions and a common thread that enables all institutions to work his trust. We heard earlier from Professor James on the important role of trust. Kenneth Arrow fifty years ago talked about virtually every commercial transaction has within itself an element of trust.

Another aspect in this museum is the silver *leais* (I think it is called), a coin which was struck, I am told, in the Oporto mint in the fourteen hundreds under the reign of King Afonso V. The *leais* means loyal or honest. I am sure I pronounced it badly but my Portuguese is not up to scratch, I know, but trust is as critical today for central banks as it was for King Afonso V, and is essential for the transmission of monetary policy. I think 50 years on Kenneth Arrow's assertions remain true. The financial system relies on trust and confidence, and central banks and regulators have a key role in ensuring the integrity of the system and ultimately to protect the citizens of the State.

> We need social capital, but how do we build it? As we heard earlier, I think from Claudio, communications matter. Expectations setting requires a central bank to communicate clearly both its objective and how it intends to achieve it, and transparency, honesty and engagement help to build credibility and to set expectations. This requires, in turn, that the public understand the mission of central banks and recognise the importance of that mission, and trust us to deliver it.

So it means effective central bank communication and growing social capital (or rebuilding social capital) requires central banks to communicate in a way that is understandable to people and speaks to issues that resonate with them. We cannot any longer rely on old intermediaries. We cannot any longer rely on traditional media as those channels are actually disappearing.

But let me just touch on two issues which are beyond monetary and financial stability. Which are I think relevant for us to just bear in mind. One is the whole issue of climate change and policies to address climate change that may appear costly in a short time horizon but deliver large net benefits in a longer horizon. We need to act in response to those challenges. But I think, as we heard earlier about the whole issue of exaggerated expectations, one thing we need to be very clear on is that central banks cannot solve the problem of climate change. Sometimes I worry that one of the risks we carry is that we allow ourselves to be presented by others, sometimes, as the institutions that can solve the problem of climate change. Well, let me tell you, we cannot, because the challenge requires action on the part of the whole community, businesses, households, as well as policymakers in the central banking community.

I want to touch on inequality because I think it is another issue that goes beyond traditional areas where central banks certainly have a role. My colleague Isabel Schnabel talked about the effects of technology on creating income inequality recently, and also the reduction in bargaining power for workers. From my perspective, inequality is something that central banks do need to pay close attention to because inequality has economic consequences, and we cannot pretend they do not. We need to understand what the implications of them are on social capital, because there are some. I think when inequality impacts social capital, it impacts ultimately on the ecosystem that central banks operate within and the trust that the public has in that ecosystem. On the other hand, I think what is also clear is that we do not have the mandate or tools to deal with society's concerns about excess income or wealth inequality. Governments are best placed to do that, but in our decisions the Governing Council does take proportionality into account and does need to understand the implications of its decisions.

So let me just conclude by saying three things, if I may. Firstly, as I said, central banks need social capital to succeed. Secondly, social capital is an important determinant of the community's wellbeing, alongside, I would suggest, human capital, natural capital, financial and physical capital, which, incidentally, altogether I like to describe as our economic capital. But that is a discussion for another conference at another time. The fact is that social capital does not grow on its own and economy, a society, the environment, are all complex systems that constantly interact with each other. We need to invest in the architecture and infrastructure, including institutions such as central banks, to enable social capital to grow. And thirdly, implicit, if not explicit, in what I just said, stasis is not an option. The frameworks in which we operate cannot be left to atrophy, and we have to be prepared to challenge ourselves to look at ideas that, to quote Keynes, ramify in every corner of our minds, and be prepared to accept that paradigms that we agreed to whether it is 30 years ago in Maastricht or at some other point of time, are fit for purpose, not just for today, but actually for the future in which we operate in.

At the end of the day, it is social capital that is going to be foundational for the world that central banks ultimately live in and have to deliver.

> I can just finish by paraphrasing José Saramago, who is one of my favourite authors. He once wrote that the history of Portugal was not that of Europe, but that the history of Europe would be unimaginable without that of Portugal. If I can paraphrase him, I think the social history of central banks is not that of social capital, but strong social capital would be difficult to deliver without successful central banks.

I look forward to the discussion. *Obrigado!*

# Antonella Trigari[14]

## Professor, Bocconi University


Antonella Trigari, Professor, Bocconi University

I am going to break the tradition and stand while showing the slides. So let me start by saying that it is really an honour to be here today and being part of this panel. Let me thank Mário for inviting me, and Pedro for his very efficient and careful preparation of the panel.

What I am going to do today is to take a very specific focus on the full employment, or maximum employment, mandate at the Fed and the ECB. In particular, I am going to clarify what we mean by the full employment mandate. I am going to go through some practical hurdles and difficulties associated with this mandate. Then, I will briefly go through how it has been revised, or not revised, in the recent monetary policy reviews of the Fed and the ECB. Finally, I will conclude with some thoughts about whether the current economic conjuncture of elevated inflation is putting some pressure and challenges on this revised monetary policy framework.

So let me start by making the distinction between the different legal mandates of the Fed and the ECB and the common monetary policy strategy. The Fed has a dual mandate, as has been mentioned a few times. The Federal Reserve Act mandates that the Fed conduct monetary policy to promote the goals of maximum employment and stable prices. The ECB has what I will call a hierarchical mandate. The primary objective of the monetary policy of the ECB is to maintain price stability. But the Treaty adds that, without prejudice to the objective of price stability, the ECB

[14] Based on the transcript of the intervention. The supporting presentation is available at: https://www.bportugal.pt/sites/default/files/antonell_trigari.pdf.

should also support the general economic policies in the European Union, contributing to the achievement on the Union objectives. We mentioned there is a long list of them, but among those, and this is very much emphasised in ECB documents, we do have full employment.

In practice, de facto the two central banks conduct a common monetary policy strategy which has been referred to – I think this is due to Lars Svensson a few years ago – as flexible inflation targeting, where here "flexible" is in contrast to "strict" inflation targeting. The idea is that any inflation targeting central bank does not only target inflation, but also, with some weight, stabilises the real economy.

> The ECB, in particular, has emphasised that the medium-term orientation that it takes in pursuing the price stability does provide room for monetary policy to take into account considerations such as maximum employment, in particular when, or in response to, adverse shocks create some trade-offs between the objective of stabilising in the short-term employment and inflation.

I am going to take this framework as a basis. Within this framework, I am going to argue that a key input to monetary policy is measures of labour market slack or measures of labour market underutilization. Why? Because these are going to be relevant to assess the progress toward both goals: maximum employment (a secondary goal for the ECB) and price stability.

Measures of labour market slack do provide, first, a measure of the cyclical position of the economy, or the cyclical position of the labour market, and they are key when it comes to managing the trade-off that may arise when, as I was saying, supply shocks move output and inflation in opposite directions. Indeed, managing this trade-off means assessing whether short-term inflationary pressures are acceptable given the state of the labour market and of the economy. The second reason why measures of labour market slack are central to monetary policy is because they offer an indicator of demand-related inflationary or deflationary pressures. In a tight labour market, where you have many jobs and few workers searching for jobs, there are going to be upward pressures on wages, production costs, and this is, of course, a key determinant of price inflation.

> Measuring labour market slack presents two main challenges. These are measurement challenges, but these are, I think, key challenges. The first one: which is the best indicator of labour market slack? Traditionally, policymakers and academics have been focusing on the unemployment rate as the main measure of labour market underutilization. But the unemployed are not the only group searching for jobs, as is clear from the fact that we do have very large flows from inactivity to employment, and from employment to employment.

At the same time, job seekers are heterogeneous because they have different "effective labour supplies", different propensities to look for jobs. For example, some workers, despite wanting a job, may provide less search effort because they are discouraged. These marginally attached workers will have lower job finding rates than, for example, unemployed workers. The consequence of this is that central banks typically do not focus on any single indicator. They go beyond the unemployment rate. Among the alternative indicators, they also look at measures such as U4, which adds discouraged workers to the unemployed, or U5, which adds all marginally attached workers.

The second challenge is that knowing the unemployment rate, or any other indicator, does not tell us if we are at full employment. We need to compare the actual rates, the actual indicators, to some "benchmark" rates that are not observable, not directly measurable, and hard to estimate. So let me just quickly refer to a very nice paper by Crump et al. (2020), where they try to put some order on the existing plethora of measures and names in the literature, providing two main categories of benchmarks. They call one "longer-run unemployment rate" (LRU), to which the economy should converge after fully adjusting to business cycle shocks, and the other "stable price unemployment rate" (SPU), which is the rate at which there are no demand-driven inflationary or deflationary pressures.

Now, the alternative indicators used by central banks to capture hidden labour market slack such as U4 or U5, simply sum the number of job seekers. Implicitly what they do is to assign the same weight to all the seekers independently of their effective labour supply. A measure of effective job seekers, which you see in the slides denoted by $S_{t,}$ includes all the job seekers, but weighted by their search intensity. Of course, the challenge is measuring search intensity. One approach taken in the literature is to proxy relative search intensity with relative job finding rate. For the US, a recent paper by Abram et al. (2020) estimates relative job finding rates for as much as 22 groups and constructs such an effective job seeker rate. They find that this effective job seeker rate provides additional information relative to, for example, the unemployment rate or other slack indicators.

In work I did for the Sintra Forum a few months ago, I tried to do the same for the euro area, and what I could do is obtain relative job finding rates for six groups of workers based on the data disseminated by Eurostat. That was what I could get. But I want to raise here a critical issue, which is euro area data availability. In this particular case, transition rates were available only from 2011, only for selected euro area countries (not for Germany), and not for key margins given the euro area institutional framework.

Let me come to the revised monetary policy frameworks in 2020 for the Fed and in 2021 for the ECB. There was a shared revision to the approach for achieving price stability, though with non-negligible differences. But the Fed also implemented a revision of the employment mandate and in particular in the statement for the longer-run goals of monetary policy. The Fed has now defined maximum employment as a broad-based and inclusive goal. It also articulates a strategy to achieving this maximum employment. The Fed is going to stabilise shortfalls of employment from maximum employment, as opposed to deviations from the maximum level. So let me briefly tell you the logic behind this. The logic is that while the Fed recognises that monetary policy is a blunt tool to target certain categories of disadvantaged workers, it also recognises that a hot economy and long expansions are very beneficial for the most disadvantaged workers, and they tend to reduce labour market differentials quite significantly.

So why shortfall and not symmetric deviation? This refers to the limits of using maximum employment as a monetary policy tool. The idea is that maximum employment is a non-observable, difficult-to-measure, imprecisely estimated object. So you would not be concerned about high employment unless it comes together with unwanted inflationary pressures, which leads to this strategy of non pre-emptive tightening of monetary policy in face of inflationary pressures.

Now, the emphasis is on the distributional effects, and in particular, the Fed conducted the "Fed listens" event to build social trust, where the emphasis was getting in touch with the communities, in particular the most disadvantaged communities, and on tailored communication to these communities.

While the ECB implemented no formal revision to the employment mandate - it simply reaffirmed the medium-term orientation of the price stability goal - the review came with very far-reaching discussions along the same lines of those that took place at the Fed. This is documented in background documents that were provided before the review.

Let me skip these slides because I am already a bit late. What I want to just mention is that there is large evidence of benefits from a hot economy, with long expansions narrowing differentials in unemployment rates. I also want to point to this, I think, very interesting paper by Fatas (2021), which I just recently came in touch with; it is called "The elusive state of full employment", which is very much related to the benefits of a hot economy.

So let me just go with my last slide. Possibly naively, I think a very natural question to ask is whether the current economic conjuncture, with these elevated inflation rates, is posing challenges to these new frameworks. I thought about it and I came to the conclusion that there is no clear contradiction with the revised framework and the current challenges. The revised framework has room and provides guidance for an appropriate response to adverse supply shocks. This consists in tightening monetary policy to some extent by trading-off inflation and activity and, of course, tolerating some inflation in face of supply shocks. This is easy in theory but difficult in practice, especially given the very high uncertainty, now exacerbated by the war in Ukraine. So the risk is between doing too much and too soon and risking a recession, versus too little, too late with the risk of losing the inflation anchor.

### Challenges from current economic conjuncture

- Revised frameworks
  - Have room/ guidance for response to adverse supply (energy and pandemic) shocks
    $\Rightarrow$ Tighten monetary policy, trade-off inflation and activity, tolerate some inflation
  - In theory, easy; in practice, hard, especially given high uncertainty: too much too soon (risk of recession) vs. too little too late (risk of losing inflation anchor)
- Specific issues:
  - Inflation anchor: policy mistake vs. bad luck; 2020 regime change
  - Inclusivity reversed in cold labor markets: policy mistake vs. bad luck
  - Data-dependent monetary policy, lacking good measurement/understanding of
    - LT inflation expectations (which ones?; salient prices; uncertainty vs. dispersion;...)
    - Labor market slack (divergent indicators)
- Broader message: Reliable and granular data key for both policy effectiveness and accountability/trust. Central banks can greatly contribute to this endeavor

Both central banks have very strongly emphasised that the response to the current situation is going to be data dependent. What I want to mention is, this is fine, and very understandable, very appreciable; but which data are key? It is going to be data on, of course, the measurement of long-term inflation expectations, and data on the measurement of labour market slack. I would argue that we are not there yet. I might have the occasion to come into this later.

> But the broader message, and I conclude, is that central banks (and in particular, I think, the ECB) can greatly contribute to providing better, more granular, and micro data.

Thank you.

# Jordi Galí[15]

## Professor, CREI and Universitat Pompeu Fabra


Jordi Galí, Professor, CREI and Universitat Pompeu Fabra

Let me thank the Banco de Portugal for this kind invitation to participate in this conference, which I'm enjoying very much. And let me just go to the point of my presentation. The panel is on "Welfare Considerations Beyond Price Stability", so I thought it would be useful to remind ourselves what the case for price stability is and then to try to make a case for deviating from price stability, at least occasionally.

So why do we want central banks to set a target for inflation, a long run target for inflation? Well, because letting inflation drift away without a clear anchor would certainly make decisions by private agents more difficult. It would make the possibility of long-term contracts in many different areas of the economy hard. I think there's wide agreement that we want a long-term inflation goal that anchors inflation expectations and that facilitates economic decisions.

Now, how high should this long run inflation target be?

Well, we know that inflation, in a world in which not everyone adjusts prices and wages continuously, generates relative price distortions.

[15] Based on the transcript of the intervention. The supporting presentation is available at: https://www.bportugal.pt/sites/default/files/jordi_gali.pdf.

> So in principle we want inflation to be as low as possible, as close to zero as possible. But we know that there are also reasons like downward nominal wage rigidities, the existence of the zero lower bound, that suggest that we may want to go above zero a bit, and most central banks have adopted this principle.

But that leaves open the question of the short run. In the short run, how should central banks respond to deviations of inflation from the target, assuming that we all agree on the long run target. I think there are two important cases or two scenarios to distinguish.

The first one is purely theoretical because it doesn't happen in reality. But it's useful for thinking about this. Suppose that the nominal rigidities, the fact that prices are sticky, that wages are sticky, were the only friction, were the only distortion in the economy. Now, in that case, what I call natural output, that is, the equilibrium level of activity that one would observe in the absence of those nominal frictions, would be efficient by definition. That would be the level of activity that one would want to aim at. So central banks would like to replicate this natural level of economic activity, and this calls for a strict inflation targeting, i.e., the stabilisation of inflation at the target. Why? Because if you stabilise inflation, that means that agents, workers, firms are happy with their current mark-ups. And that's exactly the situation that they would have if there were no nominal rigidities.

That's what has been called the "Divine Coincidence": by stabilizing inflation, you replicate the desirable allocation. Now there is a subtle issue which is what inflation measures to stabilise, and that depends on details. It depends on what the nominal variables that are sticky in the economy are, whether it is more wages or prices, and on how different sectors may be subject to different shocks that call for changes in relative prices. Then the question is how much weight to put on the price of each sector in computing the inflation measure that you want to stabilise. But this has been studied in the literature and it typically calls for stabilizing some weighted average of different inflation measures. Let's put that aside.

Let's now consider the case that is more interesting, which is the case in which there are other frictions in the economy beyond nominal rigidities. These are real frictions, real imperfections, distortionary taxes, frictions in labour markets, imperfections in financial markets and so on. In this case the natural level of output will be different from the efficient level of output. What should the central bank aim at in these circumstances? A case can be made for the central bank to aim at a level of activity that is somewhere in between what we would call the natural level of output, the one that would be consistent with stable inflation, and the efficient level of output. This implies a deviation from the natural level of output and hence may lead to a deviation from stable inflation. But it brings the economy closer to what would be the efficient level of economic activity.

> So this calls for "controlled" deviations from the long run inflation target. The central bank accepts that temporarily, in response to certain shocks and because of these real imperfections, it is not desirable to try to stabilise inflation at the target, in a continuous basis, no matter what the cost is.

This kind of reasoning is typically done in the context of models with a representative agent. If you have heterogeneous households, there are some additional things to take into account. The central bank will not be able to permanently change the distribution of income or the distribution of wealth, that should be clear. But at the margin, in the short run, it can conduct policy in a way that avoids large deviations of marginal utilities of consumption. But only at the margin, without pretending to be able to permanently change the distribution of income, like the case of climate change, which is not something that the central bank can change permanently.

So let me give you an illustration of this principle, of why it may be optimal to deviate from inflation targeting, in the context of an economy in which there are some real imperfections, and in this case the real imperfection has to do with financial markets.

This is based on some work with Frederic Boissay, Fabrice Collard, and Cristina Manea, and let me just give you the ingredients of our model. It's a new Keynesian model that is able to generate endogenous financial crisis. The fact that financial crisis are endogenous makes room for the central bank to pre-empt those financial crisis. So that's why we think this is particularly interesting. It’s a standard new Keynesian model with nominal rigidities that make monetary policy non-neutral. There's endogenous capital accumulation that generates the possibility of protracted investment booms. There are idiosyncratic productivity shocks: some firms become more productive than others, and that calls for a reallocation of capital through credit markets. That heterogeneity gives a role for financial markets in reallocating capital from less productive firms to more productive firms through credit markets. Those credit markets are subject to some frictions – private information and limited enforcement. And that generates a situation in which those credit markets may be fragile in the sense that may actually collapse. If credit markets collapse, then this desirable reallocation of resources from less productive to more productive firms may fail.

In particular, credit markets may collapse if the marginal return to capital, i.e. the return-on-investment, falls below a certain threshold. The reason is that this return on capital is a cap on the interest rate at which firms will be willing to borrow. And if the interest rate in financial markets is too low, firms that are less productive will have an incentive - instead of reallocating their resources towards the credit markets to more productive firms -, to borrow and essentially run away with that money that is, to put it in unproductive activities and eventually default.

That leads to an incentive compatibility constraint. In case the return on capital goes below that threshold leads to a situation in which there is no equilibrium in credit markets. There is no interest rate at which the supply of capital equates the demand for capital.

An investment boom, even if it's caused by fundamental factors like a productivity boom, may increase the financial fragility. Why? Because it leads to a high capital stock which will tend to reduce the return on capital. So if the reasons for that investment boom disappear, then there is a capital overhang, a situation in which there's too much capital in the economy relative to fundamentals, and the return on capital is too low. That is a situation in which the economy is very fragile, and any small adverse disturbance may generate a collapse of credit markets and what we call a financial crisis.

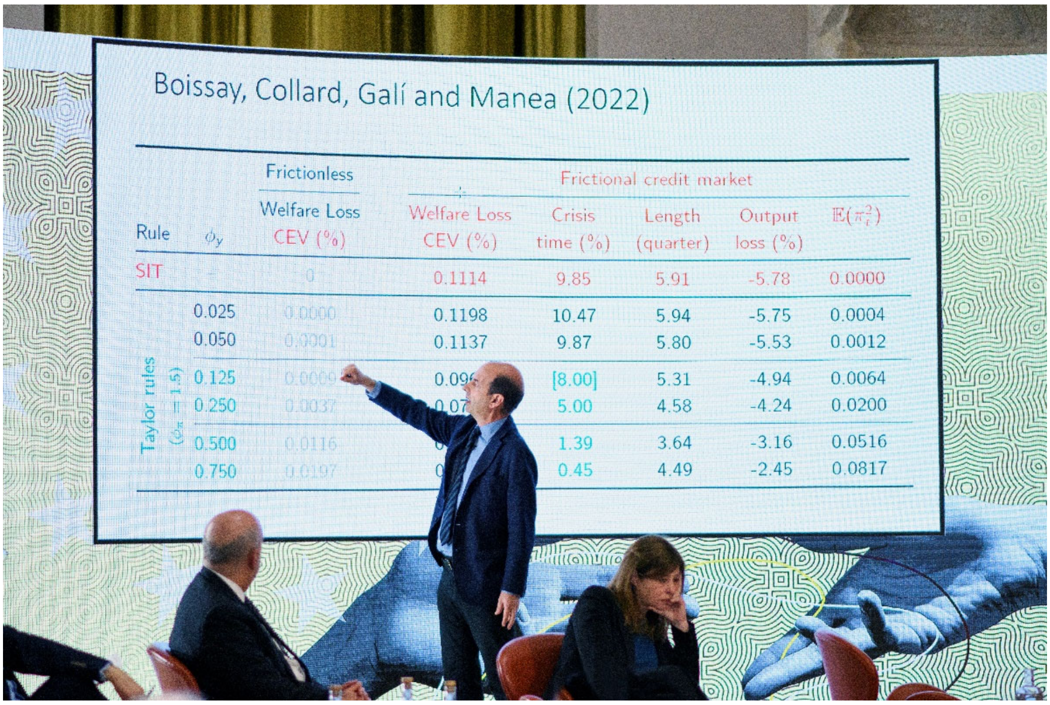
So in that environment, a greater focus on output stability from the central bank is desirable. And I'll show you in a second some simulations that show that because by stabilizing the level of economic activity the central bank will prevent this eventually excessive capital accumulation.

Of course, this comes at a price, which is a deviation from the inflation target in the short run. So let me show you a table that illustrates this. Again this is based on a simulation of a calibrated version of this model. . If the central bank follows a strict inflation targeting policy, that is, if it stabilises inflation at all times, then that's the optimal policy and welfare losses are zero.

Now let's suppose the central bank follows a more realistic policy that consists of a particular rule where it responds to inflation and to output. We assume that the response to inflation is with a coefficient of 1.5, as John Taylor proposed in his famous paper. What we're going to do here is to play with the coefficient on output so a larger value for the coefficient on output means that the central bank puts more weight on stabilising output. As you can see, in a frictionless economy stabilizing output generates welfare losses. It's undesirable because it is just optimal to stabilise inflation. Stabilising output leads to a deviation of output from the efficient level of output. And it's in principle desirable for the central bank to accommodate changes in output that match the efficient level of output. So this is an economy in which fully focusing on price stability would be desirable.

But let's move now to an economy in which we introduce financial frictions. Of course, in that economy, a strict inflation targeting will not replicate the first best, because that's not attainable. So we have some welfare losses, but what we see, and this is the main result of our analysis is that as the central bank increases the coefficient on output welfare losses may actually go down. Why do welfare losses go down? Largely because the incidence of financial crises goes down. There are fewer financial crises because there are fewer instances in which an excessive capital accumulation puts the economy in a situation of extreme financial fragility.

This is just an illustration of a good reason why central banks would want to deviate from price stability and also, I think, it's an interesting illustration of a trade-off that central banks face between the short run and the medium run. In the short run the central bank may have an incentive to stick to its inflation target, but by doing this it's increasing the probability that somewhere down the road a financial crisis will emerge. It is the independence of central banks that makes it possible, at least in principle, not to fall to that temptation of forgetting about the medium run and to accept or even engineer deviations from price stability in the short run to avoid larger welfare losses down the road. Thank you.



# Juan Dolado[16]

## Professor, Universidad Carlos III de Madrid


Juan Dolado, Professor, Universidad Carlos III de Madrid

So happy birthday Banco de Portugal! This is a very special occasion because I don't think that any of us will be able to celebrate our own 175th anniversary in the future. My paper is the last one, so I'll try to be as entertaining as possible to keep you awake. My intervention is about whether central banks should bother about inequality. I must confess I don't really understand too well what is social capital, but what I know for sure is that it is associated and I don't claim any casual effect - with inequality, especially inequality of opportunities, which is the one that really matters.

What I'm going to do is just to summarise the traditional and the alternative views. The traditional view is, somewhat, what was defended by the governor of the Bank of Ireland. Distributional issues should be side effects of a central bank's policies, whose main goal should be to stabilise the economy as a whole.

There is an alternative view, which is growing, that monetary policy could have non-negligible direct effects on inequality. I will describe a few channels, especially the business cycle one, that could be persistent and interact - and this is what is important - with the propagation mechanism of monetary policy.

[16] Based on the transcript of the intervention. The supporting presentation is available at: https://www.bportugal.pt/sites/default/files/juan_dolado.pdf.

> I think this has been illustrated very well by the growing influence of models with heterogeneous agents in the conduct of monetary policy, the so-called, HANK heterogeneous agents, and also by the literature on labour markets - where I come from - about abundant frictions in the search and matching process.

I will claim that the interaction of the two is going to be crucial in showing that the inequality effects of monetary policy should not be disregarded. That's something I talked in my intervention at the ECB Forum in last year. But today I will expand a few issues.

Let me just remind you very briefly that there are the channels through which monetary policy affects inequality. Probably the most famous one is the savings-redistribution channel, which I am talking about just to focus attention. Expansionary monetary policy illustrated by an unexpected cut of 1 percentage point in interest rates is going to benefit borrowers, hurt lenders. That's going to decrease inequality, in principle, if the borrowers are poorer than the lenders.

The interest-sensitivity channel. Lower interest rates are going to increase asset prices. Assets, especially variable income assets, are in the hands of the richer, so that's going to increase the inequality, also lower interest costs.

The Inflation channel  is the most popular one. It has been highly documented in the literature that inflation harms the poorer. So that's going to increase inequality. And then, of course, effects like access to financial markets. If we are in an expansionary framework, individuals with less access to the financial markets should have more opportunities to access it and that's going to decrease inequality.

> What I'm going to argue is that, when computing these channels, heterogeneity is going to be crucial because, as I said before, it depends on who you are and on how you are going to be affected.

There is a recent paper, by these authors in Journal of Finance, where they use the Nordic countries, which have these incredible databases for all sorts of issues, which they also make available to researchers. They have the whole population of Denmark balance sheets and because Denmark pegs the Crown to the Euro,  a change in the Euro can be assimilated to be a shock for them. What they compute is, in the horizontal axis the percentile of income of adult individuals in Denmark, and they simulate what would be the effect of a cut of an expansionary monetary policy shock.  What you see is that for the poorer individuals, those in the lower percentiles, there is a fall in income relatively to the absence of this shock, of about 2 percentage points in the in total income, capital and labour income, whereas those at the bottom make gains of about 3.5 percentage points.

This is a very important result because it's like the aggregation of the previous one. What I want to highlight here is that there is another effect, which relates to capital. This is a sort of Marshall effect, which hasn't been highlighted enough. Capital, especially capital equipment, is complementary to some types of workers. So typically, like in skilled biased technological progress, capital equipment increases the marginal productivity of capital and the marginal productivity of high skilled workers, but having more skilled workers also increases the marginal productivity of capital. So that's a vicious cycle. Whereas on the other hand, most of this capital, especially with the arrival of automation and the arrival of artificial intelligence, et cetera, is replacing low skilled workers. Thus, it's not only reducing the marginal productivity, is not only substituting lower skilled workers but is eliminating their jobs.

On top of that, when we look at the frictions that the workers face in the labour market, what we see is that they are not equal.

> Less skilled workers have much higher separation rates. They have lower matching efficiency for basic reasons that we highlight in two slides. The lower skilled workers can only perform low skilled jobs, while high skill workers can perform both, high skilled and low skilled jobs. So that's why the matching efficiency it's higher and finally they have less Nash bargaining power because, of course, they are more substitutable.

The basic mechanism to highlight through these two channels is of course, you suppose we engine an expansion in monetary policy that increases investment and aggregate demand. That increases the relative demand for complementary and more fluid, high skilled workers. That, of course, as the second round effect of increasing the marginal productivity of capital so that leads to higher investment, higher relative demand, and so on and so forth. Therefore, we have a very clear demand amplification effect. The two forces are crucial in generating that and the two forces lead to an effect, which is much stronger than having the two separate. So an economy, just with capital skill complementarity or an economy only with asymmetric search and matching frictions - I'll speed up a little bit -

When one highlights this with the data, what do you basically find after an expansionary monetary policy, for instance, in the US? You see that an unexpected cut in interest rates increases the employment ratio of the high skilled and increases the wage premium, it increases the two parts of the labour earnings differential.

For instance, if you're talking about credit, this recent literature using, Colombian data, also shows that when you look at a credit supply shock, for instance, coming from macroprudential policy, what you see is that it is the less skilled who suffer the most.

Now what do we do these days? What do we do with the Taper tantrum at the time of castration as, is getting cold. So according to this argument, that I have just developed, it is going to be lower investment and that lower investment is going to lead to less demand for high skilled workers, so inequality should get reduced. That's the flip side of the reasoning that I gave you before. But of course, and this is where the previous asymmetry comes back, remember that production is asymmetric and high skilled people can perform both jobs. Rocket scientist can be both rocket scientists and a bartender. Though a dropout can only be a bartender, it cannot be a rocket scientist. That means that as this high skilled are losing their jobs, they enter the market for less skilled people and, of course, as they enter the market for less skilled people, labour supply increases and wages are going down.

> Therefore, it seems that whatever the central banks are doing, the dangers of enhancing this short run or middle run inequality are there. It doesn't matter whether it is expansionary or deflationary.

**A new scenario: Will CB´s tapering/tightening reduce wage inequality?.**

- Taper tantrum at the time of "**gasflation**": ↓ Investment & ↓ HS employment and wages relative to LS

- But unemployed HS *trickle down* to LS job segments: ↑ LS L supply → ↓ LS wages. Same with automation &AI: middle skilled worker in routine tasks move to LS jobs.

- Is CB´s put dead if Ukraine´ invasion persists ? The combined fiscal and monetary stimulus efforts in the major developed countries has increased aggregate money supply by $20 trillion over 2020 and 2021 to a record $102.5 trillion (Bloomberg). Yet, "gasflation" is not likely to respond to a general tightening of MP.

- **MP (+) supply shock**: Need of a targeted approach: accelerate green energy transition and slow down inefficient automation by redefining TLTRO operations from a blunt toolkit to a targeted one.

So what should we do now? I mean, is the central bank put dead, it is completely dead, with Russian aggression to Ukraine? I think we have a negative supply shock. So what the central bank should implement is - as of course – also fiscal policy -a positive supply shock. How do we engine a positive monetary supply shock? Well, we need a targeted approach. We need, for instance, the TLTRO to be much more targeted than what it is now. We really need to aim at facilitating credit conditions and buying of assets of firms which are betting for greening energies and, of course, not those of firms which are inefficiently automatizing and therefore eliminating jobs that otherwise would be feasible. And that's the end of my intervention.

# Panel 2 – Discussion[17]

[Pedro Duarte Neves]: Thank you very much Juan. I am going to skip my questions, for time reasons, they would be no surprise for the speakers. Let us see if there are questions from the floor. There is one there, so just one final question, please.

[Question from the audience]: Hi, thank you so much for that, it was very interesting. This is a very quick question for the last presentation. I was wondering if the paper you mentioned with a lower interest rate for 1% given - and then you have the chart about people with less income and more income - if you had a similar one before an increase of 1% or if the paper includes that because I'd be curious to know what happens if it increases.

[Juan Dolado]: Well, the paper I cited is a paper of mine. There we just simulate expansionary monetary policy. We use a production function which has this characteristic of what is called capital skill complementarity, so more capital goods corresponds to more marginal productivity of high skilled workers. But we don't do more, as we should have two production functions, one for complex jobs and another one for simple jobs.

Simple jobs can be performed by both high skilled and low skilled workers, whereas complex jobs can only be performed by high skilled workers. That's why I didn't provide a graph for a contractionary monetary policy, that was the reason. But I'm working on this subject now. So soon I'll be able to.


[17] Based on the transcript of the discussion.

[Question from the audience]: Thank you. That was the other thing I was going to say, actually that I think it's not that easy sometimes for high school workers to go to low skilled workers, sometimes they don't know how and other times they don't want to. You know, I think it would be interesting to have that side.

[Juan Dolado]: There are very rich implications. For instance, you can have a very large increase in within skill inequality. Think, for instance, that the rocket scientists become a bartender because they lost the job. So what's going to happen? What is going to happen is the current owner of the bar is going to offer this person a lower wage than what is offering to a dropout, because they know that eventually they will leave the moment that the rocket scientist vacancy arrives, he will leave, or she will live. Therefore, within those with very high education, you will see the facts of this over education, also an increase in within wage inequality. So very rich implications of this viewpoint.

[Pedro Duarte Neves]: Thank you. Let me conclude by warmly thanking the speakers of this second panel. The inclusion of heterogeneity in the monetary policy framework is extremely important from an accountability and explainability point of view of central banks. Challenging familiar paradigms as you do is extremely important, as the best way to erode social capital is ignoring changes [*and here I quote Gabriel Makhlouf*].

With that, I thank all the participants in the conference and in the panels, and participants from the public which participated very actively. I thank as well the staff of Banco de Portugal that so well prepared this meeting.  With that, this conference is closed.

# Summing up[18]

### What is social capital?

Robert D Putnam, one of the most influential contributors to the theoretical foundations of social capital, defines this concept as follows: "*Social capital refers to the links, shared values and beliefs in a society which encourage individuals not only to take responsibility for themselves and their families but also to trust each other and work collaboratively to support each other (...) features of social organization such as trust, norms, and networks that can improve the efficiency of society by facilitating coordinated actions*".

From this definition, the following underlying ideas are crucial: (1) social capital is based on trust, norms, and values (like long-term perspective, fairness, sense of society) obtained via formal institutions or via interpersonal relationships; (2) social capital generates positive externalities; (3) these externalities materialise on expectations and behaviour, through reduction in transaction costs, promotion of cooperative behaviour, and knowledge diffusion; (4) search and trust can improve potential inefficiencies caused by imperfect information.

Social capital is one type of capital. Physical capital, human capital, intangible capital, and financial capital are other types of capital. All of them are individually important. But it is important to note

[18] Prepared by Pedro Duarte Neves. The views, opinions and conclusions expressed are those of the author and do not necessarily reflect those of the Banco de Portugal. This summing up benefits enormously from the interventions at the conference "*Rebuilding Social Capital: the role of Central Banks*". Any errors and omissions are the sole responsibility of the author.

that – as they act in a mutually reinforcing way – the sum of these individual types of capital tend to exceed their individual parts. Increasing social capital has positive externalities on the other types of capital and it is key for the functioning of the economy and society in general.

### How should Central Banks contribute to rebuilding social capital?

As Professor Harold James mentioned in his keynote, "*Citizens want a centre of stability in a world of radically changing expectations. That, I believe, is the way that central banks can and should contribute to building social capital*". The contribution of central banks to social capital can be expressed by words like *trust*, *stability*, *predictability*, *confidence*, *credibility*. Citizens value the commitment of central banks to these values, as they constitute a key element of the implicit social contract between society and central banks. The functioning of the economy, and particularly that of the financial system, relies on trust and confidence and central banks have a unique role in this. A lack of any of them erodes social capital, and, as a result, weakens the credibility of central banks.

What is then the role of central banks in creating social capital? As the most immediate response, trust in the value of the currency – achieved through the stability of the value of money and the stability of the financial system – is the most important contribution by central banks. Monetary and financial stability are the key pillars of strong and sustainable growth.

As Professor Harold James stated in his intervention, "*social capital is built through robust interpersonal connections, trust in others and a backstop in the form of legal enforcement. Trust in price signals, the specific responsibility of central banks, is a vital component of the way in which we interact. Rapidly changing prices, either inflation or deflation, undermine the basis of trust*". Price stability – and the anchoring of inflation expectations as one of the most direct implications of trust in monetary policy – has been the driving element in the redesigning of the functions of central banks, during the last three decades.

The aftermath of the Global Financial Crisis – which made so vivid in our memories how high the social costs of financial instability can be – brought a much more demanding role of central banks in the preservation of financial stability. The preservation of financial stability is now well established in the mandates of central banks. Financial reforms implemented over the last 15 years have been decisive to restore trust in market mechanisms and institutions. Financial stability is an essential contribution of central banks to social capital.

The keynote intervention of Professor Harold James brought an additional challenge for the role of central banks in rebuilding social capital: *"(…) providing a standardized public currency that doesn´t depend on credit alone, or we could think of it as a token-based currency. Existing notes and coins do this, but they can't be used in as many transactions or as conveniently as bank transfers can be managed. And that is a cost that is imposed on the poor and the most vulnerable. (…) there is stability and efficiency, but also justice arguments in making a stable store of value available to all citizens that would help to bridge the banking and the digital divide in a period when money is flux. (…) When governments can't provide this kind of basic provision of a stable currency, the demand is taken up by private and most likely less transparent and reliable manufacturers of alternatives that claim to be stable. And here, finally, some really frightening possibilities open up*". This is a challenging new dimension – even if we can see it as a precondition for monetary and financial stability – central banks all around the world are starting to address it.

The growing multiplicity and complexity of roles played by modern central banks – and these go far beyond a narrow interpretation of the mandates of monetary and financial stability – bring about many more responsibilities and much higher expectations by citizens. Central banks' responsibilities have spread, in many cases, to micro-prudential supervision, conduct supervision, supervision of insurers and the funds industry, resolution, deposit guarantee schemes, consumer protection and financial literacy. This multiplicity of tasks also brings important governance issues, as it is necessary to deal with the conflicts between the different functions.

It is therefore important, before progressing, to make two points. Firstly, it is crucial to define precisely what central banks can (and should) effectively deliver, to avoid *expectation gaps* between what they are expected to deliver and what it is possible to deliver. This is further discussed below, as a communication challenge. Secondly, it is crucial to be aware that the contribution of central banks to social capital is conditional on the functioning of other public institutions and the existing institutional frameworks.

### The conditional nature of the contribution of central banks to rebuilding social capital

The degree to which central banks contribute to building social capital depends on how credible they are as institutions: that is how much *trust* and *confidence* they transmit to citizens. Trust in central banks is directly related to their ability to (effectively) deliver. But the contribution of central banks to social capital is conditional on the functioning of other public authorities, governments in particular. The ability to deliver collectively – by governments, by central banks, and by other public institutions – is what contributes to rebuilding social capital. The institutional framework, either at national level or at European Union level, is an important conditioning factor in the rebuilding of social capital. Trust in central banks can be limited or even endangered if any part of the institutional sector is not functioning properly, or if the institutional framework is not perfectly designed.

The conference addressed these aspects from many different angles: the need to revisit (and possibly to develop) the coordination between central banks and governments; the need to revisit (and possibly to develop) the governance of the European Union; the need to revisit (and possibly to develop) the governance of the macro-prudential function in the European Union; the need to revisit (and possibly to develop) the framework of central banking on how to deal with multiple objectives. In the same vein, one could add the incomplete nature of the Banking Union as one aspect that may condition the role of central banks in preserving financial stability.

### Social capital and financial stability

Financial reforms implemented over the last 15 years have been decisive to rebuild social capital, by restoring *trust* in market mechanisms and institutions. As a result, the financial sector has become more resilient at the global level, reacting very positively under the recent unexpected shocks, even if in a context of uniquely strong policy support. In addition, financial literacy and financial inclusion initiatives – most of the times using behavioural economics to understand and address the biases in choices – promote more effective and fairer economic outcomes.

The process of rebuilding social capital is not, however, complete and the strong reforming impetus should not be interrupted before its completion, as the risk of new situations of financial instability exists. The conference contributed to identifying possible areas of action needed in the near future: completing the Basel reform at global level; developing a macro-prudential framework for the non-banking sector; addressing emerging risks for financial stability arising from digitalisation, innovation, and climate change; reinforcing financial literacy and financial inclusion initiatives.

The conference also identified some aspects which deserve further analysis and debate: interactions between monetary policy and financial stability, in particular in a context of an incomplete macro-prudential framework; the degree of usability (or releasability) of capital buffers;

the inertia bias on the use of macro-prudential instruments (borrower-based measures and/or the effective constitution of counter-cyclical buffers); the macro-prudential framework prevailing in the European Union, in terms of the interaction between National Competent Authorities and the ESRB; the role of central banks in promoting growth, economic and social cohesion within the European Union.

### Welfare considerations beyond price stability

The distributional impacts of central banks' actions have again become a key topic of debate. Intra and intergenerational distributional aspects – like those on inequality or those associated with climate transition – are increasingly important. The actions of central banks have very relevant distributional impacts. It is very important that central banks have models that capture the influence on aggregate outcomes of individual differences within groups of economic agents. The incorporation of heterogeneity in the description of the monetary transmission mechanism – as well as in the description of the impact of macro-prudential policy measures – holds as one of the most relevant topics for macroeconomic research.

The conference provided very useful insights on the needs to progress in related macroeconomic research and data requirements: modelling heterogeneity in consumer spending, labour market status, housing equity, liquidity constraints on firms and households, and possibly also expectations; progressing with identifying and quantifying the distributional effects of monetary policy as well as in the accurate description of the monetary policy transmission mechanism; further progressing on data availability, granularity, linkages between different datasets, and the development of surveys, among other dimensions. In the same vein, there is a need to progress on similar areas of research: modelling the interactions between monetary, fiscal, and macro-prudential policies; modelling the interlinkages between the real economy and the financial sector, allowing for instance for nonlinearities associated with episodes of financial instability and/or the interactions with the non-banking sector.

Policy action may have possibly unintended distributional effects that are not identified by decision makers if they use inappropriate models. Neglecting heterogeneity is a possible source of misguided conclusions. This also raises the issue of accountability: central banks should be prepared to fully understand how their actions impact the economy and the people they serve.

### Accountability

It is widely known that monetary policy is neither the main cause of inequality nor a solution for it, just as central banks cannot solve the problem of climate change. It is however fundamental that central banks have the ability to identify and to explain the side effects of their policy decisions.

Central banks should be able to explain why they have taken specific policy decisions and they should also be able to explain their respective outcomes. As said, the inclusion of heterogeneity in macroeconomic modelling is an essential component of central banks' accountability, as central banks should fully understand how their actions impact the economy in aggregate terms as well as in distributional terms.

Another important element of accountability is the evaluation of policy measures, based on rigorous ex post assessments. Evidence based policies – supported by the findings of sound economic evaluations and identification of learning lessons – are typically much more effective. This aspect also was covered at the conference, through the description of the experience of the

Basel Committee on Banking Supervision, following the endorsement by the G20 of a framework for the ex post evaluation of financial sector reforms.

### Communication

Communication is key to increasing public understanding of what central banks are supposed to deliver. It is fair to say that there are still knowledge gaps regarding objectives and missions of central banks. This may lead to an *expectation gap* (or *exaggerated expectations*) between what it is expected from central banks and what they can effectively deliver. This expectation gap may exist in many dimensions, in particular in the capacity of monetary policy and macro-prudential policy to deal with all possible economic developments, or even with what central banks are expected to do in matters like environmental transition or income distribution.

The existence of exaggerated expectations endangers social capital. As a matter of fact, exaggerated expectations erode social capital. Effective communication by central banks is required, with the purpose of fully achieving the understanding by the public on the objectives and the mission of central banks. This requires building understanding – that is, reducing knowledge gaps among the general public – in aspects like the functioning of the economy, the functioning of the financial system, monetary policy, and central banking in general. Greater accountability and transparency are essential, as well as promoting proximity with society.

### Conclusions

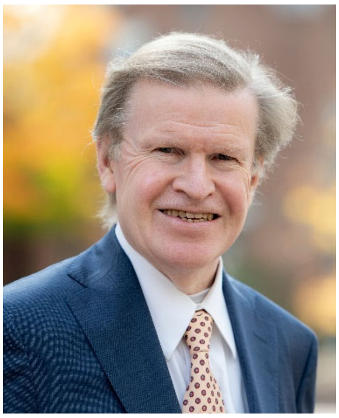
Monetary and financial stability are the key pillars of strong and sustainable growth. Episodes of inflation and financial instability – associated with sizeable distributional effects which are felt most acutely by the less well-off – contribute to an erosion of social capital. The preservation of trust in the value of the currency – achieved through the stability of the value of money and the stability of the financial system – is the most important contribution by central banks to rebuilding social capital.

The conference "*Rebuilding Social Capital: the role of Central Banks*" contributed in many ways to addressing the role of central banks in the current challenging times. The main contributions of the conference were the following: (1) the contribution of central banks to rebuilding social capital is conditional on the functioning of other public institutions (governments, in particular), and on the institutional framework, either at national level or at the European Union level; (2) the completion of financial reforms and the promotion of financial literacy and financial inclusion are important for reinforcing trust in market mechanisms and institutions, following the substantial progress made over the last 15 years; (3) macroeconomic research should further include distributional aspects, as neglecting heterogeneity is a possible source of misguided conclusions; (4) accountability of central banks can be further built by improving macroeconomic modelling and by implementing evidence based policies, supported by the findings of sound ex post assessments; (5) effective communication requires building understanding by the public on the objectives and the mission of central banks, minimizing the risk of the existence of an expectation gap between what it is expected from central banks and what they can effectively deliver.

# II Curricula Vitae

## Mário Centeno, Governor

Governor of the Banco de Portugal since 20 July 2020, Mário Centeno has a PhD in Economics from Harvard University, master's degree in Applied Mathematics and an Economics Degree from the Lisbon School of Economics and Management, Universidade de Lisboa.
His most recent professional experience include the duties of Minister of Finance in the XXI Constitutional Government (2015-19) and Minister of State and Finance in the XXII Constitutional Government (2019-20). He was elected President of the Eurogroup from 2018 to 2020. In that capacity he was President of the Council on the European Stability Mechanism, and participated, as observer, in the Governing Council of the European Central Bank. He also chaired the Board of Governors of the European Investment Bank (2017-18).
Prior to that, he was deputy head of the Economics and Research Department (2004-13) and Adviser to the Board of Directors (2013-15) of the Banco de Portugal.
He is a full professor at Universidade de Lisboa as well as at Universidade Nova de Lisboa. Within the scope of his academic experience, he has published in various Portuguese and international scientific journals.



## Harold James, Keynote speech

Currently the Claude and Lore Kelly Professor in European Studies at Princeton University, is Professor of History and International Affairs at the Woodrow Wilson School. His books include a study of the interwar depression in Germany, The German Slump (1986); an analysis of the changing character of national identity in Germany, A German Identity 1770-1990 (1989); International Monetary Cooperation Since Bretton Woods (1996), and The End of Globalization (2001), which is available in 8 languages. He was also co-author of a history of Deutsche Bank (1995), which won the Financial Times Global Business Book Award in 1996, and he wrote The Deutsche Bank and the Nazi Economic War Against the Jews (2001).
His most recent books include Family Capitalism, Harvard University Press, 2006; The Creation and Destruction of Value: The Globalization Cycle, Harvard University Press, 2009; Making the European Monetary Union, Harvard University Press, 2012; The Euro and the Battle of Ideas (with Markus K. Brunnermeier and Jean-Pierre Landau), Princeton University Press, 2016; Making A Modern Central Bank: The Bank of England 1979-2003, Cambridge University Press 2020; The War of Words: A Glossary of Globalization, Yale University Press 2021.
He is the official historian of the International Monetary Fund. In 2004 he was awarded the Helmut Schmidt Prize for Economic History, and in 2005 the Ludwig Erhard Prize for writing about economics. He writes a monthly column for Project Syndicate.

## Pedro Duarte Neves, Chair Session

Currently Adviser to the Board of Directors of Banco de Portugal. He also chairs EU groups on financial stability and banking issues, within the scope of the Joint Committee of the ESAs and of the EBA.

He was Vice-Governor of the Banco de Portugal (2006-2017) and Alternate Chairperson of the EBA (2013-2018). He represented the Banco de Portugal at the main high-level regulatory and supervisory fora (EBA, SSM, ESRB, and FSB). Duarte Neves was also the Chairman of the Deposit Guarantee Fund, the Resolution Fund, and the National Council of Audit Supervision. Prior to that he was the Chairman of the Board of ANACOM (the national regulatory authority for communications).

Duarte Neves is Visiting Professor at Católica Lisbon School of Business and Economics. He holds a PhD in Economics from Université Catholique de Louvain and undertook his doctoral research at University College London, the Institute for Fiscal Studies, and the Center for Operations Research and Econometrics. He has several publications in scientific journals and regular policy contributions. He joined the Banco de Portugal in 1994, as Head of the Public Finance Unit at the Statistics and Economic Research Department.

## Athanasios Orphanides, Panellist Session 1

Professor of the Practice of Global Economics and Management at the MIT Sloan School of Management and Co-Chair of the Asia School of Business.

He is also an Honorary Advisor to the Bank of Japan's Institute for Monetary and Economic Studies, a member of the Shadow Open Market Committee, a Research Fellow at the Centre for Economic Policy Research, a Senior Fellow at the Center for Financial Studies, and a Research Fellow at the Institute for Monetary and Financial Stability.

His research interests are central banking, finance, and political economy and he has published extensively on these topics.

Before joining MIT Sloan, he held positions at central banks in the United States and in Europe. From May 2007 to May 2012, he served a five-year term as Governor of the Central Bank of Cyprus and was a member of the Governing Council of the European Central Bank. Following the creation of the European Systemic Risk Board in 2010, he was elected a member of its first Steering Committee. Earlier, he served as Senior Adviser at the Board of Governors of the Federal Reserve System, where he had started his professional career as an economist.

## Claudio Borio, Panellist Session 1

Was appointed Head of the Monetary and Economic Department at the Bank for International Settlements on 18 November 2013.

At the Bank for International Settlements since 1987, Claudio Borio has held various positions in the Monetary and Economic Department (MED), including Deputy Head of MED and Director of Research and Statistics as well as Head of Secretariat for the Committee on the Global Financial System and the Gold and Foreign Exchange Committee (now the Markets Committee).

From 1985 to 1987, he was an economist at the OECD, working in the country studies branch of the Economics and Statistics Department. Prior to that, he was Lecturer and Research Fellow at Brasenose College, Oxford University. He holds a DPhil and an MPhil in Economics and a BA in Politics, Philosophy and Economics from the same university.

Claudio Borio is author of numerous publications in the fields of monetary policy, banking, finance and issues related to financial stability.

## Lucrezia Reichlin, Panellist Session 1

Professor of Economics at the London Business School, non-executive director of AGEAS Insurance Group, sits on the Board of Morgan Stanley International and its German subsidiary and is a Trustee of IFRS. She is also a Fellow of the Econometric Society and the European Economic Association.

Lucrezia Reichlin has been an active contributor to Centre for Economic Policy Research. She was research director in 2011-2013, first Chairman of the CEPR Euro Area Business Cycle Dating Committee, co-founder and scientist in charge of the Euro Area Business Cycle Network, and is now a trustee.

Lucrezia Reichlin has published numerous papers on econometrics and macroeconomics. She is an expert on forecasting, business cycle analysis and monetary policy. She pioneered now-casting in economics by developing econometrics methods capable of reading the real time data flow through the lenses of a formal econometric model. These methods are now widely used by central banks and private investors around the world.

## Pablo Hernández de Cos, Panellist Session 1

Governor of the Banco de España and member of the Governing and General Council of the ECB. He is Chair of the BCBS and of the Advisory Technical Committee of the ESRB. He is member of various European and International Committees including the ESRB, the FSB, the BIS Group of Governors and Heads of Supervision, the Advisory Board of the FSI and the CEMLA. He is also Vice-Chairman of the Board of the Spanish Macroprudential Authority Financial Stability Board (AMCESFI).
Prior to his current position he was Director General for Economics, Statistics and Research of the Banco de España, headed its Economic Policy Analysis Division, worked as an adviser to the ECB's Executive Board and as an Economist at the Banco de España.
He holds a PhD in Economics (Complutense University of Madrid), a degree in Economics and Business Studies from the University College of Financial Studies (CUNEF) and a degree in Law (UNED).

## Antonella Trigari, Panellist Session 2

Associate Professor of Economics at Bocconi University. She received a PhD in Economics from New York University in 2003. She is a Fellow of the European Economic Association (EEA), a Research Fellow at the Center for Economic Policy Research (CEPR), a Research Fellow at the Innocenzo Gasparini Institute for Economic Research (IGIER) and a Research Fellow at the Baffi Carefin Centre. She is currently a member of the Euro Area Business Cycle Dating Committee (EABCN), she served as Programme Co-Chair of the 2021 EEA Congress and was previously a Council Member of the same association. She has served as Associate Editor of the Journal of Monetary Economics and as Panel Member of Economic Policy.
She has been a visiting researcher at numerous central banks, including the Sveriges Riksbank and the De Nederlandsche Bank, and a consultant at the International Labour Organization (ILO) and the Bank of England. She is also the Director of the MSc in Economic and Social Sciences (ESS) at Bocconi.
Her research interests focus on macroeconomics, labour-macroeconomics and monetary economics and she has published on these topics in numerous scientific journals, including the Journal of Political Economy, The Review of Economic Studies and the Journal of Monetary Economics.

## Gabriel Makhlouf, Panellist Session 2

Took up his position as Governor of the Banc Ceannais naÉireann/Central Bank of Ireland on 1 September 2019.
He chairs the Central Bank Commission, is a member of the Governing Council of the European Central Bank, a member of the European Systemic Risk Board, and is Ireland's Alternate Governor at the International Monetary Fund. As Governor, Gabriel Makhlouf leads an organisation that is responsible for monetary and financial stability, prudential regulation and financial conduct. Before joining the Central Bank, he was Secretary to the New Zealand Treasury from 2011 to 2019. During his time as Secretary, he led reviews of New Zealand's three macroeconomic pillars (monetary, financial stability and fiscal policy) and the development of a new framework for economic and public policy focused on intergenerational wellbeing (and including the concept of social, natural, human and financial/physical capitals).
Gabriel Makhlouf has also worked in the UK Civil Service where his roles ranged from policy on tax and welfare issues through to large-scale operational delivery. He was responsible for the UK's Government Banking Service and has also chaired the OECD's Committee on Fiscal Affairs. Gabriel Makhlouf has degrees from the Universities of Exeter and Bath, and is an alumnus of INSEAD Business School.

## Jordi Galí, Panellist Session 2

PhD in Economics at the Massachusetts Institute of Technology (MIT) in 1989. He is currently a Senior Researcher at the Center for Research in International Economics (CREi), a Professor at Universitat Pompeu Fabra and a Research Professor at the Barcelona School of Economics (BSE).
He was the CREi's Director between 2001 and 2017. He has held academic positions at New York University and Columbia University. He has been a Visiting Professor at MIT. He is a Research Fellow at the CEPR, a Research Associate at the NBER, and a Fellow of the Econometric Society. He has served as a co-editor of the Journal of the European Economic Association and co-director of the CEPR International Macroeconomics Programme. In 2012 he served as President of the European Economic Association.
Among other awards, Jordi Gali has received the National Research Prize from the Government of Catalonia and was co-recipient of the Yrjö Jahnsson Award. He has been a consultant to the ECB, Federal Reserve, Sveriges Riksbank, Norges Bank, Banque de France, and other central banks.
His research interests include macroeconomics and monetary theory, and has published articles on these topics in numerous scientific journals.

## Juan J. Dolado, Panellist Session 2

Got his Phd from University of Oxford in 1988. He has been Lecturer at Oxford (1988-89), Chief-economist of the Division of Quantitative Analysis at the Research Department of the Banco de España (1990-1997), Professor of Economics at European University Institute (2014-2018), and at UC3M (1998-2013 and 2019--).

He is an Hononary Fellow of the European Economic Association and Spanish Economic Association (President in 2001), and Research Fellow of CEPR. He was awarded the Prize Jaime I de Economia in 2015 and Vanguardia de la Ciencia in 2011.

His research deals with topics in Labour Economics (e.g. dual labour markets, the gig economy contracts, gender economics), econometric theory (e.g. long-memory processes, factor models, quantile regression), and monetary macroeconomics (monetary policy and inequality). Some of his papers have been published in top general interest and field journals, having collected a large number of citations.

His research has been funded, among other institutions, by the European Commission (H2020 Program), Consolider Project (Spanish Ministry of Science and Technology), Ministry of Education, and Bank of Spain Excellence Program.