Luncheon Address: Central Banking in Uncertain Times: Conviction and Responsibility

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As always, it is a great pleasure to be here in Jackson Hole—and to take the opportunity that this gathering offers each year to reflect on the longer-term prospects for our economies. Let me mention at the start of my exposition that nothing of what I will say can be interpreted in terms of the future monetary policy decision of the Governing Council next Thursday. My colleagues and myself are in our purdah period.

During the financial crisis of the past three years, without ever forgetting their medium- and long-term goals of price stability, central bankers have often had to focus on very short-term developments. At times, we have had to ask what will happen in the next week, in the next day or even in the next few hours. Now, as the dust settles somewhat and market conditions tend to improve, though not without occasional setbacks, it is appropriate—and necessary—to look again at the more fundamental challenges we face. The chosen topic for this conference—with its focus on "the decade ahead"—is thus particularly timely.

The financial crisis required prompt, decisive and innovative actions by central banks and governments around the world. We at the European Central Bank (ECB) have pursued what I have previously labeled at this symposium a policy of "credible alertness"[1]: solid anchoring of inflation expectations combined with bold and resolute action when price stability in the medium term is threatened and financial developments hamper the transmission of monetary policy to the real economy.

Looking forward, the advanced economies now face another, related challenge: how to deal with the legacy of the excesses and imbalances accumulated over the previous decades by households, firms and financial institutions—notably the expansion of debt, the build-up of risk and the increase in leverage.

The financial crisis was a symptom of these imbalances. Treating symptoms can relieve the immediate pain. But such an approach neither cures the underlying chronic problems nor reduces vulnerability to recurrence. Indeed, the crisis has led to the emergence of yet another imbalance: a large and rapid growth in public debt.

Treating these more fundamental imbalances is a key challenge for the coming decade, a challenge that can be expressed in various ways: reducing the debt overhang; establishing more sustainable levels of leverage; reabsorbing excess liquidity; and restructuring and strengthening the balance sheets of banks, households, firms, governments and central banks.

Just as we showed courage in facing the pressing demands of the crisis itself, now policymakers must be equally courageous in dealing with these longer-term threats to stability and growth.

That is the topic of my remarks today. I will briefly review the origins and extent of the imbalances that have accumulated over the past three decades. I will then examine the implications of the need to deal with these imbalances for today's macroeconomic policy makers.

Finally, I shall reflect more broadly on the challenges for central bankers in periods characterized by elevated uncertainty and the need for preventive action. It is in this context that I will discuss the relationship between the standard and nonstandard measures of monetary policy making. This is more than a mere technical matter. It goes to the very heart of our role in uncertain times. Deeply, our decisions on such measures are a reflection of our fundamental conviction and fundamental responsibility.

I. Debt Accumulation in Advanced Economies

The current debt problems in advanced economies did not start yesterday. They have had a long gestation over the past few decades, originating in the financial deregulation and innovation of the 1980s and 1990s. In many advanced countries, new financial products and institutions emerged, which changed the economic behavior and balance sheet structure of the private sector.

On the one hand, financial innovation promised to be welfare-enhancing for society: Some consumers could smooth their spending over time more easily, and access to mortgage financing became much more widely available, including to segments of the population previously excluded from the market.[2] The benefits of deregulation and innovation appeared particularly pronounced in the exceptionally benign precrisis macroeconomic environment, which became known as the "Great Moderation."

On the other hand, and with the benefit of hindsight, we can say that the Great Moderation was the calm before the storm. The easier access to finance permitted by financial innovation was also leading to higher leverage in the private sector, especially in financial institutions, to a seemingly inexorable increase in house prices, and to a surge in risk-taking. Rajan's (2010) analysis of the "fault lines" in our economies reveals some of the deeper drivers of excessive credit growth, in particular as a way of addressing the macroeconomic consequences of inequality in societies.

Household indebtedness rose substantially—in some cases, doubling relative to the 1980s—reaching historically unprecedented levels and exceeding 100% of disposable income in many advanced economies. Increased indebtedness meant that households were increasingly stretched to cover their commitments and therefore less resilient to adverse shocks.

Leverage also increased for nonfinancial corporations, leading to an overall expansion of balance sheets and a change in their structure.

As a result, debt-to-GDP ratios for nonfinancial corporations in the euro area and the United States increased in the past 10 years from roughly 65 percent to 75 to 80 percent.[3]

And of course, leverage also increased in the financial sector. This development was particularly evident here in the United States, where it was compounded with structural transformation, including the rise of the shadow banking sector, the spread of the "originate to distribute" model and the greater interconnectedness between institutions.

But the key trends—an accumulation of risk (despite its apparent off-loading to off-balance-sheet vehicles) and an expansion in the size of balance sheets—were common across countries. Compared with the rest of the private sector, moreover, the financial sector also became increasingly dependent on instruments of shorter maturity, thus leaving banks exposed to liquidity shocks and disruptions in the money market.[4]

The crisis suddenly brought to a halt the progressive accumulation of private debt. Partly as a result of large-scale stimulus measures, but also reflecting the impact of the automatic stabilizers and, to a more limited extent, the cost of supporting the financial system and the implicit liabilities of guarantees to the banking sector, leverage has started increasing in the public sector.

Fiscal deficits have shot up to peacetime highs. By the end of this year, government debt in the euro area will have grown by more than 20 percentage points over a period of only four years, from 2007 to 2011. The equivalent figures for the United States and Japan are between 35 and 45 percentage points. And the response to the crisis has led to a considerable increase in the balance sheets of central banks.

The key challenge for stability and growth over the coming decade is to ensure a progressive reduction in the debt overhang and strengthening of the balance sheets of banks, households, firms, governments and central banks.

The debt overhang bears the ultimate responsibility for slowing down the economic recovery. Left with the need to reduce their debts and accumulate more assets, households have significantly increased their saving rates, leading to protracted sluggishness in the growth of private consumption. The key lesson of history is that sustainable, longer-term growth can only be ensured once fundamental economic imbalances are treated.

II. Options for Reducing the Debt Overhang

Several ways of dealing with the legacy of excesses and imbalances accumulated over previous decades have been tried in the past. Let me discuss them in turn to assess whether they are viable options now. You will not be surprised to know that I exclude any kind of debt repudiation in the industrialized countries from these options.

1. Inflation?

A recurrent suggestion for solving a debt overhang is the creation of surprise inflation. Again, let me clearly dismiss this type of action. The history of the debasement of money through hyperinflation has been disastrous everywhere. Even before reaching extremely high levels, surprise inflation produces an arbitrary redistribution of wealth and creates a burden for the unprepared, especially the weakest.

In addition, surprise inflation would destroy the hard-won credibility of central banks worldwide. After a short period, the loss of credibility, and increased inflation uncertainty, would lead to a world with higher volatility, higher risk premia and higher nominal and real interest rates. We would be left with no alleviation of outstanding debt and, ultimately, with lower growth, as we witnessed during the Great Inflation of the 1970s. The now-classic work on time inconsistency clearly points to the permanent and substantial costs of the loss of credibility once inflation and inflation expectations cease to be anchored.

2. Living with the debt?

What about the option of "living with the debt?" Some have suggested to ignore existing financial imbalances "for the time being" and focus only on the short term. Rather than pressing on with the deleveraging process, more spending could be encouraged to sustain growth in the short term.

I believe that adopting this view would be very dangerous for our economies. There is a very clear example of the consequences of choosing to live with the debt: Japan in the 1990s. The "lost decade" in that country was the result of allowing the banking system to remain fragile over many years.

Banks appear to have contributed to economic weakness by rolling over the bad debts of inefficient firms.[5] Banks' inadequate capitalization implied that they were unwilling to take losses. Low productivity growth in those inefficient firms and the locking-in of capital and labor put a drag on potential output.[6] Only a healthy financial system is able to provide funding for good projects that spur productivity and innovation.[7]

The lesson from past history is that dealing with the legacy of accumulated imbalances is not simply a duty to be fulfilled after the economic recovery, but rather an important precondition for sustaining a durable recovery. The primary macroeconomic challenge for the next 10 years is to ensure that they do not turn into another "lost decade."

This lesson is consistent with economic theory and evidence. Since the time of Irving Fisher, economists have explored the impact of a legacy of indebtedness for growth. In various ways, these analyses suggest that an excessive debt burden—whether emanating from the corporate, household or public sector—constitute a drag on spending, thereby dampening growth.

For firms, for example, high indebtedness reduces their net worth and the ability to borrow for new projects. Consequently, firms will postpone investments until they are able to restore sound balance sheets. Similarly, households' precautionary saving could remain high until their wealth-to-income ratios return to more normal levels, following the collapse in asset values at the peak of the crisis.[8]

Economic growth can also be threatened by high public indebtedness, which, without a credible fiscal retrenchment plan, can generate substantial uncertainty. Firms and households know that ultimately they will have to bear the consequences of the painful measures needed to reduce debt. As long as it is unclear when the adjustment will occur and who will bear what fraction of the costs of adjustment, firms and households may delay their investment and consumption decisions, slowing down the economic recovery. In the data, evidence points to the existence of a negative association between the level of public debt and subsequent GDP growth, which is particularly marked at high debt levels.[9]

Finally, the debt overhang can make it attractive for governments to adopt regulatory measures that compel the financial and/or household sectors to hold government debt at low or even negative real interest rates—measures referred to as "financial repression." Forced investment in government bonds distorts the role of the financial system in channelling resources to the most efficient firms and slows down economic growth. While the effects of financial repression on growth are particularly severe, these effects may also occur through excessive financial regulation.[10]

So the option of "living with the debt" indefinitely is not a solution to the challenges currently facing policymakers, nor is it a means to ensure sustainable economic recovery. We must focus on policies to address the debt overhang.

3. *Growing Out of the Debt*

The most appealing solution to the debt overhang is clearly to achieve strong economic growth. Strong growth produces higher income and wealth, thus increasing the net worth of households and firms and reducing their leverage. Robust economic growth also boosts government revenues and reduces expenditure, especially when large automatic stabilizers are in place, thus leading to a rapid reduction of the government debt-to-GDP ratio.

A spectacular example of the effect of growth on public finances is provided by the United Kingdom, which managed to reduce the government's debt-to-GDP ratio from close to 240 percent at the end of the Second World War to 60 percent in the early 1970s. How did this turnaround come about?

- First, real interest rates on government debt were kept relatively low. This reflected an environment of "financial repression"—including severe restrictions on the activities of financial institutions combined with controls on international capital movements.

- Second, economic growth was relatively strong during this period (averaging 2.4 percent a year), reflecting both increased productivity and labor force growth.

- Third, fiscal policy was overall disciplined and, indeed, in a number of years, fiscal surpluses were recorded.[11]

Of course, such processes may well be linked and reinforce one another. For example, fiscal discipline may yield additional benefits due to favorable confidence effects on interest rates and growth.

Although the U.K.'s postwar experience is encouraging, it should not lead us to be too sanguine about future prospects for the advanced economies. First, a return to an environment of financial repression is neither desirable nor feasible. It would represent a reversal of the trend in policy over the last 40 years toward freer capital markets.

Second, we should probably not expect the real growth rates in the developed world to go back to the levels of the 1950s or 1960s, an era now characterized by economic historians as a "Golden Age."[12] That being said, one should never underestimate the room for higher growth potential through resolute structural reforms, particularly in Europe, which is still marked by numerous rigidities. And given that population growth rates will differ significantly among economies in the decade ahead, we have to focus more on per-capita growth rates in our international comparisons.

III. Policy Challenges

To summarize, the crisis and the legacy of decades of debt accumulation have left the advanced economies with high private sector indebtedness and public sectors that must be trimmed. Reducing the debt overhang and obtaining sustainable levels of leverage for all actors in the economy is the only option for achieving the goal of the Toronto summit declaration in June: to "create strong, sustainable and balanced global growth." At the same time, creating an environment for strong and sustainable growth will facilitate the adjustment process needed to address the debt overhang.

The enormous challenge for policymakers in the advanced economies is thus to set in motion this mutually reinforcing positive scenario of deleveraging and strong and sustainable growth. For those governments that are faced with high debt-to-GDP ratios, this implies that merely stabilizing those ratios is not sufficient: Efforts to accelerate the pace of consolidation are needed.

Aging populations and associated increases in spending on health and pensions require that all fiscal authorities allow budgetary room to respond to those substantial future costs. In the euro area, for example, aging-related spending is expected to rise by around 4 percentage points of GDP over the period from 2004 to 2050.[13] For governments that face a sluggish growth rate, that implies a continuation along the path of structural reform in product markets, labor markets and financial markets. At the same time, central banks face the challenge of maintaining price stability.

Let me say here, in front of many colleagues who are participating actively in the global endeavor to accelerate financial repair and reform—particularly through the remarkable work of the Financial Stability Board and of many workshops that have been established, including the Basel Committee—that I consider their work decisive. We are now at a crucial moment in this process. In all that follows, I am making the working assumption that we will rely in the next decade on very solid ground as regards financial rules and regulations and micro- as well as macroprudentials.

I will concentrate now on fiscal policies of governments and on the role of central banks in the years to come in this context of debt overhang.

1. The Role of Governments

First, governments. Given the size of the accumulated public debt, fiscal consolidation will have to be ambitious. In the euro area, to reach the reference value of a debt-to-GDP ratio of 60 percent, a cumulative drop of almost 30 percentage points will be needed. Such reductions are not uncommon. Beside the postwar U.K. experience, sizeable debt consolidations have been implemented in Belgium, which over a period of 14 years from 1994 to 2007 reduced its ratio from 134 percent to 84 percent; in Ireland, which reduced its debt ratio over a 13-year period starting in 1994 by 69 percentage points; and, starting in the mid-1990s, in Spain, the Netherlands and Finland, which saw their debt-to-GDP ratios drop in the range of 20 to 30 percentage points.

What we can learn from these historical experiences is that large reductions in debt-to-GDP ratios are not uncommon and quite feasible. In all cases, the fiscal adjustments mainly occurred through expenditure cuts[14], but they were also supported by lower interest payments due to falling interest rates. It is clear that given the currently low interest rates, governments cannot count on a similar channel, although in some countries with very high debt levels, there may be scope for considerable reductions in yields on government bonds.

Once it becomes clear that policymakers should not count on artificially low interest rates or high growth alone to reduce government debt ratios, fiscal consolidation—an increase in taxation and/or a reduction of expenditure—becomes essential. The concern is, however, that in the short run, the deficit reductions—although unavoidable in the long run—have negative effects on aggregate demand. The economy, it is sometimes argued, is at present too fragile and thus consolidation efforts should be postponed or even new fiscal stimulus measures added.

As I pointed out recently[15], I am skeptical about this line of argument. Indeed, the strict Ricardian view may provide a more reasonable central estimate of the likely effects of consolidation. For a given expenditure, a shift from borrowing to taxation should have no real demand effects as it simply replaces a future tax burden with a current one.[16]

There is the additional argument positing that credible fiscal deficit reductions through expenditure cuts lead the private sector to expect a lower future tax burden, especially when the nature of the cuts make future tax reductions more likely. This can generate higher consumption expenditures and more investment. In countries with healthy household balance sheets, a virtuous effect can take place when governments announce and implement a reduction of the deficit. Expansionary fiscal contractions arise when the virtuous effects are large enough to offset the negative government demand effects.[17] There is some evidence suggesting that this outcome is not just a theoretical curiosity.[18]

The size and likelihood of such positive confidence and expectation effects in the short run will depend on a number of clearly identified characteristics of deficit consolidation. One such characteristic is timeliness. As all experiences have demonstrated, postponing a necessary fiscal consolidation is costly. The confidence of markets in government can show sudden and large swings, which increase risk premia on government bonds and complicate consolidation.

Indeed, deteriorating fiscal situations go hand in hand with higher risk premia.[19] In addition, empirical evidence suggests that risk premia rise in a non-linear and disproportionate fashion with debt ratios.[20] Finally the period after the Lehman default in September 2008 illustrates that markets can react with larger increases in risk premia on government bonds when the fiscal situation is not deemed credible in the long run.[21]

Timeliness does not necessarily mean that all measures are implemented immediately. Rather, it implies that a credible long-term plan is announced in time. Although fiscal adjustment itself may be gradual, it is important to announce a credible road map for fiscal consolidation as soon as possible. With a credible road map, and a consistent step-by-step implementation of the consolidation measures that it involves, the uncertainty diminishes or perhaps even vanishes completely. As a consequence, fiscal consolidation pushes the economy toward a durable recovery.

In addition, fiscal consolidation must be well-targeted. Permanent measures are preferable to temporary ones. Often, one-off actions take the form of asset sales or sale and lease-back operations that temporarily improve budget deficits. Although such measures temporarily reduce the official deficit numbers, their one-off nature suggests unwillingness to change the fiscal stance structurally and to support them through a credible longer-term policy. In contrast, permanent measures can be expected to lead to positive expectation effects.

Research suggests that fiscal consolidations targeted at reductions in spending and government wage bill are likely to be more successful than consolidations based on tax increases. One of the possible reasons why increases in taxes can hamper consolidation efforts is that they raise unit labor costs if unions do not accept real income cuts.[22] Indeed, often fiscal imbalances and a loss of competitiveness are intertwined. More generally, fiscal consolidation measures that support structural reform and productivity growth will tend to have more positive effects.

2. *The Role of Central Banks*

Let me now turn to central banks. Their role as anchors of stability is all the more important in times of deleveraging. A credible, medium-term orientation on price stability is the best contribution that central banks can make toward sustainable, stable growth. A credible commitment to price stability anchors inflation expectations, depresses inflation risk premia and contributes to keeping longer-term interest rates low, thus helping to contain the costs of servicing public and private debts. Such a commitment to price stability must be symmetric, ruling out both inflation and deflation.

Maintaining inflation expectations anchored at levels consistent with price stability remains of the essence. Central banks have learned over the past 30 years that this requires acting in a predictable manner, within a framework that is understood by price setters as consistent with the maintenance of price stability in the medium term. At the same time, the framework needs to strike a balance between fostering predictability through steady-handedness and the need for flexibility when facing unforeseen circumstances.

In the exceptional times of the past three years, the response to the crisis by central banks around the world has led to the adoption of nonstandard measures, which by their nature are less predictable in their special features. It would be hard to argue that their precise implementation could be foreseen ex ante as the obvious and necessary reaction implied by their monetary policy strategy to a "financial crisis event." Such degree of predictability would only be attained if central banks could foresee all possible future contingencies, and thus provide an exhaustive list of their reactions to all of them. Naturally, this is impossible in response to a crisis, which is likely to emerge in a way that could not be anticipated in its details.

Nevertheless, in the case of the ECB, the nonstandard measures adopted during the crisis are ultimately embedded within the same medium term-oriented framework, and their effectiveness depends on the credibility of this framework. Both our program of enhanced credit support, the main aim of which was to facilitate banks' liquidity management and access to funding at a time when money markets in particular started to be dysfunctional, and the more recent Securities Market Programme, under which the ECB intervenes to ensure depth and liquidity in dysfunctional securities market segments, are ultimately aimed at reducing the risks to medium-term price stability arising from the possibility of "disorderly deleveraging" and the associated disruption of the transmission mechanism of monetary policy.

There is therefore a certain parallel and a common motivation in these programs. The common motivation is the need to ensure as much as possible a proper transmission channel for monetary policy, even in difficult circumstances. A central bank cannot permit its chosen monetary policy stance not to be transmitted to the real economy. The parallel is that the first program designed in the crisis in 2008 focused on the turmoil in the money market that at the time was dysfunctional and prevented a proper transmission of the chosen monetary policy stance to the financial system and the real economy. The second program, set up this year, focused on the turmoil in the sovereign bond market. This market is of significant importance in the transmission of monetary policy because interest rates on government paper are important reference rates, and because government paper is widely used as collateral and represents an important asset on balance sheets of financial institutions.

Reflecting on the decisions taken in the crisis so far and the challenges in the decade ahead, I would like to share with you some reflections on three issues that are, in my view, of great importance for public authorities, particularly central bankers. First, the issue of uncertainty.

Second, the issue of crisis prevention. And third, the issue of the relationship between standard and nonstandard measures taken by central banks. It seems to me that these three issues could very well characterize the next decade.

(i) Uncertainty

First, uncertainty. Today, central bankers have to take decisions in an environment marked by a degree of uncertainty in the economic and financial sphere that seems to me largely unprecedented. This uncertainty does not have a single cause. Rather, it is the outcome of a combination of factors. The acceleration of major advances in science and technology (not only information technology), the ensuing structural transformations of our economies, the ever-growing complexity of global finance and the overall process of globalization are themselves creating a multidimensional acceleration of change.

These phenomena contribute not only to a wider degree of uncertainty in underlying probability distributions, including fat tails. They also entail a much more significant element of Knightian uncertainty—that is, the type of uncertainty in which there is no underlying probability distribution.

The inherent and multidimensional phenomenon of uncertainty represents an additional difficulty for all economic agents. And it is undoubtedly a major challenge for public decision makers and particularly for central banks.

For decision makers in such demanding circumstances, I would stress several attitudes that seem to me more important than in the past:

- First, the need to be humble—to have a greater degree of humility in the face of facts that are not only surprising or "abnormal" but sometimes close to incredible. Several times in the past three years I have been reminded of Thomas Huxley's famous assessment of many scientific "beautiful theories" being killed by "ugly facts!"

- Second, the need to be alert: Even before the crisis, I proposed a posture of "credible alertness," suggesting that it was the best approach for a central bank to anchor inflation expectations firmly, while being ready to take action at any point in time. What is recommended in normal times seems to be even more advisable in times of accelerated and unpredictable change: A central bank has to be even more prepared to act without being the prisoner of previous commitments, not, of course, on goals, which must always be clear and immutable, but on policy actions. This is true for decisions on "standard measures" as well as for decisions on "nonstandard measures."

• Third, the need for swift action: In periods of accelerated change, the sequence of unfolding events means that even small changes in initial conditions can make a huge difference over time. This is naturally the case in a crisis. It has been noted that crises are "Lorenzian" in the sense that "the flap of a butterfly's wings can cause tornadoes."[23] But it seems to me that the necessity to stand ready to make decisions swiftly goes beyond the unfolding of a crisis: In periods of accelerated change, swift action might be essential to prevent loss of control of the situation. Again, this seems to me to be true both for standard and nonstandard measures.

(ii) Crisis prevention

The second major issue for the next decade is crisis prevention. It is generally accepted that prevention is better than cure. Nevertheless, I have been struck by the fact that, in very difficult periods, when, unfortunately, the long-term ex ante prevention of turbulence has not been effective, the immediate decisions that appear necessary to avoid the crisis might not be fully understood by external observers, including the general public.

This creates a challenging communication issue when public authorities have to act preemptively to prevent a crisis when people do not see the drama having occurred. There is a paradox characterizing the decision-making of public policy, whether decisions are taken by governments or by central bankers. When a crisis happens, with all its dramatic consequences, external observers; public opinion; and, when and where needed, parliaments will understand the situation and be inclined to support appropriate measures, which has been the case several times over the last three years on both sides of the Atlantic. But when measures are wisely taken ex ante, precisely to avoid the unfolding of an acute crisis, then decision makers' actions might not be fully understood. It is very difficult for external observers, the general public and parliaments to calculate the counterfactuals—what would have happened if action had not been taken.

For governments, this is a very sensitive aspect of the "political economy" of decisions aiming at prevention in times of looming crisis. Over the last three years, we have observed a number of illustrations of such difficulties in Europe as well as in the United States.

As regards central banks, I would insist on the fact that their independence from governments and from political authorities—as well as from any pressure groups—is, in such circumstances, absolutely key to permitting them to take the appropriate preventive decisions. In sum, what I would call the "apolitical economy" of central banks' decisions in these demanding times is more important than ever.

(iii) Standard and nonstandard measures

Finally, let me turn to the third issue—the standard and nonstandard measures. Reflecting on the exceptional situation that characterizes central banking in the developed world since 2007, I believe that the qualities that are expected from central banks are analogous with the two sets of ethical virtues suggested by Max Weber: the ethic of conviction and the ethic of responsibility.

The ethic of conviction makes the decision-maker find his essence in the constancy of his inner relation to certain ultimate value, to paraphrase Max Weber.[24] There must be therefore a full integrity between intention and action. In "normal times," central banks' governing councils seem to me very much guided by such an ethic of conviction. Their intention, their ultimate value is crystal clear: It is the delivery of price stability in the medium and long run, as the primary goal and as a necessary condition for the highly desirable objectives of sustainable and balanced growth and sustainable job creation.

A solid accumulation of theoretical and empirical work has confirmed the pertinence of monetary policy strategies that ensure "full integrity between intention and action." The counter example of the Great Inflation, an episode marked by lack of conviction from the part of the central bankers, confirms the decisive importance of the "ethic of conviction."

According to the ethic of responsibility, actions have to be analyzed in terms of their consequences, taking account of their causal relationship to the empirical world. The stress is put therefore on the integrity between action and consequences and not between action and intention. While underlining the distance separating the two types of ethic, Max Weber says: "This is not to say that an ethic of ultimate ends is identical with irresponsibility or that an ethic of responsibility is identical with unprincipled opportunism."[25] He insisted that they should be brought together: "The ethic of conviction and the ethic of responsibility are not absolute opposites. They are complementary to one another (…)."[26]

It seems to me that precisely in the demanding times we are presently experiencing, a combination of the two ethics is appropriate —with an equal role being played by both. The call to scrutinize very closely the consequences of our decisions is justified by the fact that the monetary and financial environment presents unusual and rapidly changing features so that the normal functioning of the monetary policy transmission mechanism is at stake.

The "nonstandard measures"—which I would associate perhaps more closely with the ethic of responsibility—are precisely designed to help restore a more normal functioning of the transmission mechanism and contribute to recreating an environment where the "standard measures"—which I would see associated more closely with the ethic of conviction—can operate effectively.

This puts in perspective the separation that central banks are making between their policy interest rates and monetary policy stance — namely the standard measures—and, in particular, the full allotment mode in the supply of liquidity, the longer-term refinancing of commercial banks by the central bank or the purchases of securities— namely the set of nonstandard measures. The monetary policy stance is always designed to deliver price stability in a medium- and longer-term perspective. The nonstandard measures have a clear purpose: ensuring that the standard measures themselves are transmitted as effectively as possible despite the otherwise-abnormal functioning of some markets. All the nonstandard measures taken during the period of acute financial market tensions, referred to as "enhanced credit support" and the Securities Markets Programme, are fully consistent with our mandate and, by construction, temporary in nature.

Seen through this lens, it is easily understandable that most central banks have been keen to stress that they will take their decisions on standard measures independently of their decisions on nonstandard measures. For example, the ECB and other central banks have indicated clearly that interest rate increases could perfectly well take place independently of the phasing out of the nonstandard measures if those nonstandard measures continue to be fully justified by the situation. Equally, the total phasing out of the nonstandard measures would not mechanistically be associated with interest rate increases.

IV. Conclusions

Let me conclude. With our focus here in Jackson Hole on the decade ahead, I believe that one of the most important questions for central bankers is to distinguish what is structural and what is conjunctional in the new environment in which we have to take our decisions.

I am convinced that, together, we will surmount the difficulties our economies are experiencing and that the G20 strategy for strong, sustainable and balanced growth will be successful. The central banks will continue to prove their capacity to preserve price stability in the next 10 years as they have done in a remarkable way over the past 10 years, despite all difficulties. That being said, I am equally convinced that the next 10 years will continue to present many new and unexpected challenges.

Unprecedented uncertainty, in all its dimensions, will make our task more complex, if not less inspiring. What I have called the "apolitical economy" of our decisions, including the most difficult ones, will be more important than ever in an environment where counterfactuals are almost impossible to communicate.

We will have to rely on our responsibility to take account of the "ugly facts," which, under special circumstances, might hamper the transmission of monetary policy, and on our conviction to ensure the very solid anchoring of inflation expectations—something that is more important than ever in turbulent times.

I would like to reiterate that nothing in what I have said should be interpreted in terms of the future monetary policy decisions next Thursday.

Endnotes

[1]Trichet (2009).

[2]This has been labeled the "democratization" of access to credit. See, e.g., Green and Wachter (2007) and Dynan (2009) for a discussion of the developments in the United States and Blake and Muellbauer (2009) for analysis of a number of European countries.

[3]See, e.g., ECB (2009).

[4]See Brunnermeier (2009).

[5]Caballero, et al. (2008).

[6]Ahearne and Shinada (2005).

[7]Popov (2009) investigates how venture capital and bank finance affect large manufacturing firms in local U.S. markets. Popov and Roosenboom (2009) study how private equity affects the rate of entry of European firms.

[8]Carroll and Slacalek (2009) suggest that a simple buffer-stock saving model can be used to think through the developments of household saving and consumption after the crisis. When asset values collapsed, the saving rate jumped up as households began rebuilding their wealth. This process has taken time and, as a consequence, household spending has been depressed. The tightening of credit availability and the increase in unemployment risk also dampened household spending. Both induced more precautionary saving, as households have worried about losing a job and being unable to borrow to finance consumption after experiencing adverse income shocks.

[9]See Reinhart and Rogoff (2010). Similar evidence is found by Kumar and Woo (2010), who also report that an increase in the initial debt-to-GDP ratio is associated with a slowdown in per capita GDP growth.

[10]See, e.g., Levine (1997).

[11]Clark and Dilnot (2002).

[12]Temin (1997).

[13]See Economic Policy Committee and the European Commission (2006) and Balassone, et al. (2004).

[14]ECB (2010).

[15]See Trichet (2010).

[16]Barro (1979) and Barro (1989).

[17]An overview of empirical evidence on non-Keynesian effects is given in Briotti (2005).

[18]Giavazzi and Pagano (1990) and Blanchard (1990) investigate the experience of Ireland (1987-89) and Denmark (1983-86), and argue that a reduction in public spending, through positive confidence and expectation effects, led to expansion in the private sector also in the short term.

[19]See Table 1 on page 8 in Haugh, et al. (2009), for an overview of the literature on the estimated impact of fiscal variables on interest rates.

[20]See among other, Alesina, et al. (1992); Ardagna, et al. (2007); Bernoth, et al. (2006).

[21]Schuknecht, et al. (2010).

[22]Alesina and Perotti (1997).

[23]See E. N. Lorenz (1972).

[24]Weber (1903-06/1975), p.192.

[25]Weber (1918).

[26]Weber (1919/1994), p. 368.

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