1. The concepts of price stability, financial stability and financial efficiency

Price stability

Price stability is defined as a state in which the general level is literally stable or the inflation rate is sufficiently low and stable, so that considerations concerning the nominal dimension of transactions cease to be a pertinent factor for economic decisions. The general definition is widely accepted, although there is some debate regarding the appropriate choice and compositions of the price index, the precise quantitative definition or operational target for price stability, and the appropriate time horizon over which monetary policy should aim at preserving price stability. A key answer for these problems is the European Central Bank, which aim at a year – on – year increase in the HICP of below, but close to 2% over the medium term.

The objective of maintaining price stability has been assign to central banks for good reasons. First, decades of practical experience and a large number of economic studies suggest that monetary policy will contribute most to improving economic prospects and raising the living standards of citizens by maintaining price stability in a lasting way (Box 1).

Second, the theoretical foundations of monetary policy can ultimate only influence the price level in the economy. Thus, price stability is the only feasible objective for a single monetary policy over the medium term. By contrast, apart from the positive impact of price stability, monetary policy has no scope for exerting any lasting influence on real variables.

The goal of price stability immediately follows from the benefits of stable and low inflation, which promotes higher economic output. Furthermore, an institutional commitment to price stability is one way to lessen the time-inconsistency of monetary policy, and a price stability goal will not lead to lower employment in the long run. An institutional commitment to the price stability goal provides a counterbalance to the time-inconsistency problem, because it makes it clear that the central bank must focus on the long run and thus resist the temptation to pursue short-run expansionary policies that are inconsistent with the long-run, price stability goal.
Box 1 The benefits of price stability

The objective of price stability refers to the general level of prices in the economy and implies avoiding both prolonged inflation and deflation. There are several ways in which price stability contributes to achieving high levels of economic activity and employment.

1. Price stability makes it easier for people to recognize changes in relative prices since such changes are not obscured by fluctuations in the overall price level. This enables firms and consumers to make better-informed decisions on consumption and investment. This in turn allows the market to allocate resources more efficiently. By helping the market to guide resources to where they can be used most productively, price stability raises the productive potential of the economy.

2. If investors can be sure that prices will remain stable in the future, they will not demand "inflation risk premium" to compensate them for the risks associated with holding nominal assets over the long term. By reducing such risk premia in the real interest rate, monetary policy can contribute to the allocative efficiency of the capital market and thus increases the incentives to invest. This in turn fosters economic welfare.

3. The credible maintenance of price stability also makes it less likely that individuals and firms will divert resources from productive uses to hedge against inflation. For example, in a high inflation environment there is an incentive to stockpile real goods since they retain the value better than money or some financial assets in such circumstances. However, stockpiling goods is not an efficient investment decision, and therefore hinders economic growth.

4. Tax and welfare systems can create perverse incentives that distort economic behaviour. In most cases, these distorsions are exacerbated by inflation or deflation. Price stability eliminates the real economic costs entailed when inflation exacerbates the distortionary impact of tax and social security systems.

5. Maintaining price stability prevents the considerable and arbitrary redistribution of wealth and income that arises in both inflationary and deflationary environments. An environment of stable prices therefore helps to maintain social cohesion and stability. Several cases in the twentieth century have shown that high rates of inflation or deflation tend to create social and political instability.

Source: European Central Bank

An institutional commitment to price stability can also encourage the government to be more fiscally responsible and thus promote one of the preconditions for good monetary policy. When a government has committed to price stability it is more difficult for it to run large budget deficits. Politicians may be more likely to recognize that eventually they will have to pay for current deficit spending by raising taxes and will not be able to resort to the so-called inflation tax, the issuing of printing of money to pay for goods and services that leads to more inflation and is thus inconsistent with the price stability goal.
Financial stability

Financial stability is a condition on which the financial system – comprising of financial intermediaries, markets and market infrastructure – is capable to withstand shocks and the unravelling of financial imbalances, and it is expected to do so for the foreseeable future. Safeguarding financial stability, that is the resilience of a financial system to risks and vulnerabilities, is important as it mitigates the likelihood that shocks to the financial system, or the unravelling of financial imbalances, can lead to disruptions in the financial intermediation process which are severe enough to significantly impair the allocation of savings to profitable investment opportunities.

Understood this way, the safeguarding of financial stability requires identifying the main sources of risk and vulnerability: assessing whether the financial system is facilitating a smooth and efficient reallocation of financial resources from savers to investors; and evaluating whether financial risks are being appropriately priced and efficiently managed. This is because financial stability has a forward looking dimension: inefficiencies in the allocation of capital or shortcomings in the pricing and management of risk can, if they lay the foundations for vulnerabilities, compromise future financial system stability and therefore economic stability. Consequently, monitoring financial stability with a systemic perspective and in a comprehensive manner is of major importance. For this reason many central banks around the world, including the European Central Bank, are addressing their financial stability mandates in part through the periodic issuing of a public report.

A financial system is one part of a larger economic, social and political system. It is affected by economic, social and political developments, and in turn affects the performance of the economy and the well-being of society more generally. To illustrate the financial stability framework, Figure 1 presents a stylized view of factors affecting financial system performance. Finance helps the economic system allocate resources, manage risks, and absorb shocks, while the presence of market imperfections implies a role for public sector policy. In the figure, this is indicated by the financial systems links with the real economy and policy. An explicit distinction is made between imbalances that arise within the financial system and those that may originate or be exacerbated by disturbances from outside the system. This distinction is primarily motivated by differences in policy implications. As crucial element of the financial-stability framework is the interaction between analyses and policy formulation and implementation.

Financial efficiency

Financial efficiency can be defined as a condition in which the resources available in a financial system are allocated to the most valuable investment opportunities, at the lowest possible cost. In an efficient financial system, markets are competitive, information is accessible and widely disseminated, and the conflicts between borrowers and lenders that arise from agency problems are effectively dealt with through market contracts. In this way, financial efficiency contributes to minimizing the wedge between borrowing and lending rates, as well as the dispersion of risk-adjusted borrowings costs across individuals.

From this definition, it is obvious that reducing regulatory entry costs in financial markets, and more generally, enhancing competition, transparency, innovation and financial market integration will enhance financial efficiency.

While financial stability and financial efficiency are different concepts, they are interrelated. Obviously, a high
degree of financial efficiency, in which resources are allocated efficiently from savers to investors and where risks are appropriately priced and distributed, normally contributes to financial stability. At the same time, stability is a precondition for a smooth and efficient functioning of the financial system.

Figure 1 Stylized View of Factors Affecting Financial System Performance

However, while financial stability and financial efficiency are in principle complementary, history has shown that there are also circumstances in which attempts to enhance the efficiency of the financial system may undermine financial stability at least in the short term, the converse may also be true.

2. The role of monetary policy

The contributions of price stability to financial stability and financial efficiency

Monetary policy, by delivering price stability, contributes to the efficient functioning of the real economy and to economic growth and welfare through various means. First, it protects the real purchasing power of money and household’s real disposable income. Second, it enhances the proper functioning of markets and eliminates uncertainly created by high and volatile inflation rates. Stable prices make it easier for people to recognize changes in relative prices as these are not blurred by the general upward drift of all prices. As a result, markets are better able to allocate resources to their most efficient use. Third, price stability also facilitates long-term planning and contracting as people
can safety rely on money as a measure of value. This allows people to concentrate on productive activities rather than on strategies to protect their wealth and income against inflation or deflation.

Another beneficial effect of the credible achievement of price stability, which has become more evident and better understood in recent years, is the anchoring inflation expectations to price stability, which implies that temporary deviations of inflation from levels consistent with price stability are not expected to be long-lasting. As a result, adverse supply shocks, such as an increase in oil prices, have a reduced impact on inflation and economic activity and, at the same time, monetary policy has more leeway to respond to such shocks. In fact, the reduction in the volatility of inflation and economic activity observed since the mid-1990s can at least in part be attributed on the success in anchoring inflation expectations.

By eliminating market distortions and uncertainties arising from inflation and anchoring inflation expectations, price stability also contributes to financial stability and financial efficiency, in various ways. First, a direct efficiency – enhancing effect of price stability is the reduction of risk premia in the interest rates as a result of diminished uncertainty about the future inflation and future policy rates. Second, by improving the transparency of price movements in financial markets and anchoring inflation expectations, price stability reduces the likelihood of misperceptions about possible future asset returns. In turn, this lowers the risk of misalignments between asset prices and economic fundamentals, which fosters both the stability and the efficiency of the financial markets. Third, by maintaining price stability, monetary policy also allows banks and borrowers to avoid potential balance sheet problems related to unexpected but persistent deflation. Such problems may arise because unexpected deflation increases the real cost of debt-servicing becoming unable to repay their debt, ultimately resulting in financial stability. Finally, a monetary policy that is credible geared to achieving price stability also avoids creating moral hazard problems, and, as a result, excessive risk taking, which might arise if financial market participants expect that monetary policy will help cushion a potential fall in asset prices or will inflate the economy in response to a financial crises.

The role of financial stability and efficiency for the conduct of monetary policy

The stability and efficiency of a financial system have important implications for the conduct of monetary policy. Improvements in the efficiency of the financial system increase the effectiveness of the transmission of the impact of the policy rates on the broad range of interest rates and asset prices which are relevant for financing, saving and investment decisions. There is some empirical evidence to suggest that, as a result of increased deregulation, integration and innovation and therefore improved efficiency of the euro area financial sectors, the pass-through of policy rates to bank lending rates in the euro area has accelerated in recent years.

Instability in the financial system may reduce the effectiveness of monetary policy. For example, in case of severe financial instability, a reduction in policy rates may have weaker effects than under normal conditions, because increasing risk premia prevent lending rates from falling, or because of credit rationing arising from a general unwillingness on the part of banks to lend. In the worst case, such a situation may ultimate lead to policy rates hitting the zero lower bound, if the monetary authority’s successive attempts to reduce the costs of credit do not succeed in improving credit market conditions.
A higher degree of financial efficiency, resulting from the further development of capital markets, can also contribute to the conduct of monetary policy by improving the availability and quality of information that can be extracted from the financial markets. For monetary policy, this means an increased availability of financial indicators which leads to better estimates of private sector expectations and the improved assessment of uncertainties about future developments in real growth, profits, inflation and interest rates. This additional information can enhance the formulation and conduct of monetary policy. However, in order to properly extract financial market information, it is necessary to have a good understanding of the determinants of the level and evolution of risk premia in assets yields. For example, the difference between nominal bound yields and real yields of inflation-linked bonds, known as the break-even inflation rate, comprises the average rate of inflation expected by the market over the maturity of the bonds and the premium investors demand for incurring the inflation risk. Thus, in order to be able to extract investors’ inflation expectations, we have to estimate the inflation risk premium.

In sum, financial stability and efficiency matter for the conduct of monetary policy because the above mentioned effects and signals have to be taken into account in the assessment of the monetary policy stance. If this is the case, should financial stability and efficiency also have a bearing on the monetary policy strategy – the general framework and guiding principles for monetary policy?

This is an interesting and pertinent question. In the long – run, there is no trade – off between price stability and financial stability, there can be situations in which such a trade-off arises over the short to medium term. In particular, a question that is often debated is how monetary policy should react to perceived asset price misalignments or bubbles. Some of these misalignments may imply risks to financial stability. A recently expressed view, supported in particular by analysis presented by the Bank for International Settlements, is that a too narrow focus on monetary policy on price stability in the short term might pose risks to price stability in the longer term, as the potential consequences of financial instability for long-term price stability might be overlooked.

The role of monetary and supervisory policies

Even if the nexus between the two concepts still requires further theoretical and empirical study, public policy is confronted – already here and now – with real, practical challenges in responding to developments in the financial system which affect the complex, multi-faced, and time-varying interrelation between financial stability and efficiency. As an example we can mention three challenges:

1. How should the competent national supervisory and regulatory authorities deal with the risks posed by asset price bubbles. A menu of options seems conceivable; with a view to preventing, ex ante, the emergence of asset bubbles, supervisory initiatives ranging from dialogue to direct regulation may help to realign long-term incentives for risk-taking. Central banks, even those without supervisory functions, can also contribute by calling attention to the risks and vulnerabilities in the financial system through their financial stability work. Ex post, that is, in the case where a bubble has already emerged, the adoption of specific prudential measures (increases in prudential risk weights on top of the regulatory minimums for high Loan-To-Value (LTV) loans in the case of real estate price bubble) might help.

2. What are challenges posed by integrating financial markets in Europe?
The interactions between financial integration and financial efficiency and their relationship with financial stability are complex, and this is an area that we are only just beginning to understand. Increased integration is likely to improve the capacity of the system to diversify risk over a larger number of economic agents. It also implies that the number of potential contagion channels in the financial system will be greater, meaning that large adverse shocks will no longer remain localized, but will be propagated more broadly across the financial system. This may mean that the frequency of financial crises may diminish as financial integration proceeds or could also imply that the severity of crises, when they occur, could be greater than before. Is therefore important to monitor the increasing inter-linkages between different participants in the financial system.

3. In what manner does the specific environment created by Economic and Monetary Union affect the relationship between monetary and supervision policies? Monetary policy is conducted for the euro area as a whole, supervisory policy is still primarily based on national competencies and coordinated through the relevant EU Lamfalussy Committees, such as Committee of Banking Supervisors. One important implication of EMU is that monetary policy can no longer directly respond to national developments, let alone to regional ones.

3. Conclusions

In our article we tried to tackle the triangular relationship between price stability, financial stability, financial efficiency and the role of monetary policy and supervisory policy in attaining these objectives. As we know, triangular relationships can be complex and conflict-hidden. Nevertheless, we have tried to shed some light on the nature and dynamics of some of the fundamental interlinkages between the three concepts, and some general conclusions have emerged:

- Monetary policy geared towards price stability contributes to financial stability and efficiency by eliminating market distortions and uncertainties arising from inflation and by anchoring inflation expectations. Transparency in the conduct of monetary policy is important in this respect. However, while a credible and stability-orientated monetary policy is a necessary condition for financial stability and financial efficiency, it is not a sufficient condition for achieving these objectives.
- Improvements in the efficiency of the financial system increases the effectiveness and the speed of the transmission of the impact of monetary policy in the economy, while financial instability influences monetary policy effectiveness adversely. Efficient financial markets also enhance the quality and availability of financial indicators which can provide useful signals for the formulation and conduct of monetary policy.
- Central banks, through their financial stability and macro-prudential supervision contribute safeguarding financial stability and thus complement the activities of the competent supervisory and regulatory authorities.
- In the long run, financial stability and financial efficiency are complementary and should reinforce each other. In the short run, however, there can be circumstances in which trade-offs between the two exist.

Further theoretical and empirical work is needed to elucidate the relationship between financial efficiency and stability, and the connection to central bank policy.
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