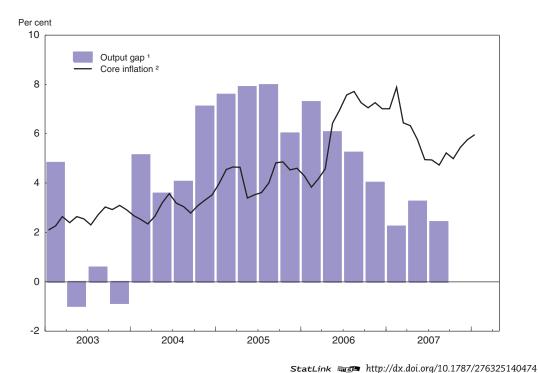
Chapter 2

# Towards a more effective monetary policy

In response to renewed inflationary pressures, monetary policy needs to remain tight until inflation expectations have moved back to and are well anchored at the policy target. While excessive inflation has persisted despite large increases in the policy rate, monetary policy has the capacity to stabilise the economy. The Central Bank's communication strategy has greatly improved but arguably policymakers have continued to react too slowly to new information and to be overly optimistic about the inflation outlook. As well, reforms in the financial sector, above all the long-awaited restructuring of the Housing Financing Fund, and refinements to the inflation targeting framework would strengthen the transmission mechanism of monetary policy. In view of these considerations, unilaterally adopting the euro and thereby sacrificing a potentially effective stabilisation tool would not seem warranted currently.

### Implementation and communication of monetary policy

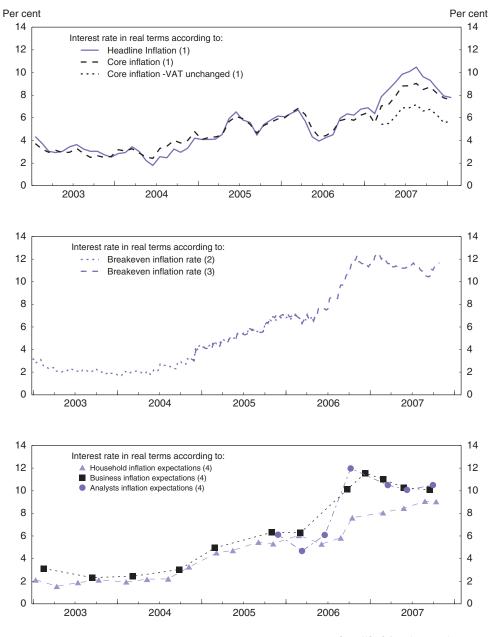
The previous *Survey*, published in August 2006, was rather critical of the implementation of monetary policy. It argued that the policy reaction to excessive inflation rates had been insufficient and called on the Central Bank to tighten policy further. Since then (or, in fact, somewhat earlier) the conduct of monetary policy appears to have improved. In response to an overheated economy and rates of inflation well above the 2½ per cent target (Figure 2.1), the Central Bank increased policy rate from 10.9% in May 2006 to 13.3% in December 2006. As shown in Figure 2.2, the real interest rate has roughly doubled according to most measures, rising on average by 5 points since mid-2006. Late in 2007, however, earlier shortcomings appear to have resurfaced.



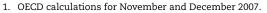


Output gap defined as the percentage difference between actual and potential gross domestic product.
 Year-on-year increase in core consumer prices (CPI less agricultural products, vegetables, fruits and petrol).
 Source: Statistics Iceland, OECD Economic Outlook 82 database.

As shown in Figure 2.3, the price acceleration registered at the end of summer was more than "a temporary deviation along the disinflationary path outlined in the Bank's July forecast" (Central Bank of Iceland, 2007a). One can argue that the policy stance should have been tightened earlier and more aggressively. It would have been a move well-justified by



#### Figure 2.2. Central bank policy interest rate in real terms



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- 2. Given the breakeven inflation rate measured by the spread between the yield of the Treasury un-indexed bond maturing in 2013 and that of the Treasury inflation-indexed bond maturing in 2015.
- 3. Given the breakeven inflation rate measured by the spread between the yield of the Treasury un-indexed bond maturing in 2013 and that of the HFF inflation-indexed bond maturing in 2014.
- 4. Inflation one-year ahead.

Source: Central Bank of Iceland, Monetary Bulletin (2007-3).

the Bank's own assessment that in September "domestic demand [was] still robust ... labour market remain[ed] tight, turnover and housing demand [were] buoyant and the pace of lending growth [had] accelerated" (Central Bank of Iceland, 2007b). In contrast, the Central Bank waited until November to hike the policy rate, and then left it unchanged at

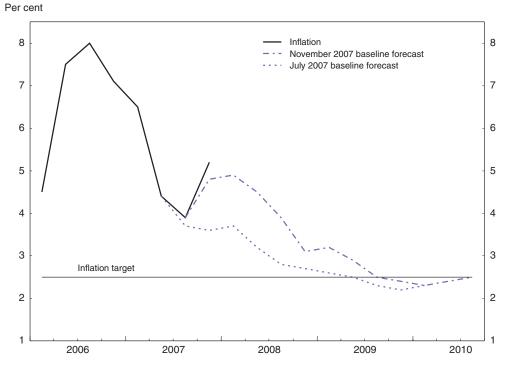


Figure 2.3. Central bank inflation forecasts

an extraordinary policy meeting in December in spite of mounting inflationary pressures. While these actions could be justified by tighter financial conditions and concerns about the turmoil in the global financial markets, they raised again the perception that political pressures pose a significant constraint to the implementation of monetary policy. It is therefore critical that members of government respect the independence of Central Bank policy making and refrain from publicly suggesting interest-rate cuts, whilst the Board of Governors shows a firmer hand in its fight against inflation to credibly establish its credentials. All in all, contrary to the criticisms that one often hears in the political debate within Iceland, the current restrictive stance of monetary policy is needed to disinflate the economy and restore equilibrium. If anything, the policy rate was increased too timidly.

While there seems to remain some room to improve the conduct of monetary policy, the new communication strategy adopted by the Central Bank at the beginning of 2007 has gone going well beyond the recommendations of the last *Survey*. In particular, following the lead of the Reserve Bank of New Zealand, Norges Bank of Norway and Riksbank of Sweden, the Central Bank of Iceland now publishes its conditional expectation of the path of interest rates. The benefits of disclosing the policy forecasts of the monetary authorities can best be explained in terms of enhanced transparency. More specifically, best practice for monetary policy is to aim at impacting long-term interest rates in order to exert significant effect on consumption and investment decisions, and thus on prices. Interest rates at the long end of the yield curve are primarily driven by expectations on how the policy rate will evolve over time rather than by current headline inflation. Thus, greater transparency on the expected path of the policy rate is thought to increase the

StatLink 📷 http://dx.doi.org/10.1787/276363372753 Source: Central Bank of Iceland, Monetary Bulletin (2007-2) and (2007-3).

effectiveness of monetary policy by enhancing the credibility of the central bank and fostering a clearer understanding of its decisions among market participants. Some commentators have expressed concerns about disclosing the policy interest path arguing that it may put the monetary authority in a straightjacket where the only two available options may be between a different but suboptimal policy rate and surprising markets. And either would impair the credibility of the monetary authority. In part to address this issue, in Iceland as elsewhere, fan charts have been introduced to communicate to markets the uncertainties around the outlook and simulations have been made available to illustrate how the central bank would react to alternative developments. In sum, these concerns do not seem well founded. Indeed, preliminary evidence from Norway is that monetary policy has become predictable (and hence more effective) since Norges Bank began publishing its policy rate path in 2005. Even in Iceland, there are already some signs that the increased transparency has brought some additional clout to the Central Bank's statements that it intends to maintain a tight stance. This is reflected in the medium-term yield curve, which has tended to flatten out since mid-2006. A more fundamental consequence is that financial markets are now better informed about the likely stance of monetary policy in Iceland than in most other OECD economies. The results should be a closer correspondence between medium-term interest rates and the goals of monetary policy. Flowing from this, the economy should become more stable.

The combination of higher short term rates and clearer communication has led to a noticeable increase in medium- and long-term interest rates in the second half of 2006 and over the course of 2007 (Figures 2.4 and 2.5). However, both nominal and indexed bond

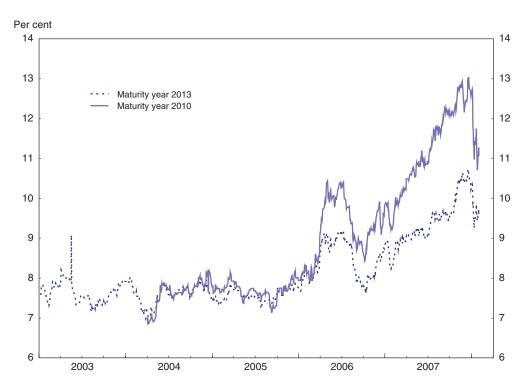
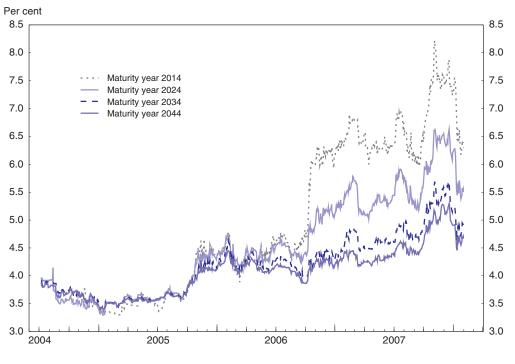


Figure 2.4. Medium-term nominal Treasury bond yields

Source: Central Bank of Iceland.

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### Figure 2.5. Yield on indexed HFF bonds

Housing Financing Fund bonds

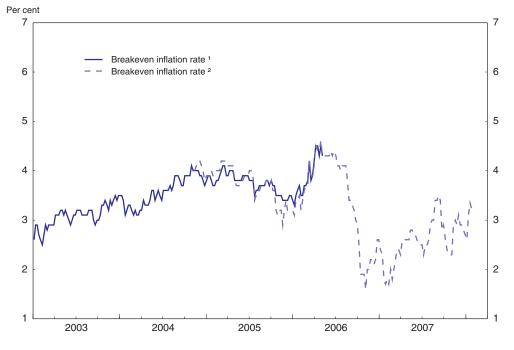
Source: Central Bank of Iceland.

yields fell steeply at the beginning of 2008, partly in response to developments in global financial and concerns about Icelandic banks (Box 1.4). More generally, it should be emphasised that the existence of a deep secondary market in near-risk-free bonds is very important. First, it provides an important benchmark for pricing of debt instruments issued by third parties, such as municipalities and private companies, and thus improves the efficiency of the domestic financial market. Furthermore, the yield curves of these bonds provide an important measure of the market's inflation expectations at various time horizons, and thus, as explained in the paragraph above, strengthen the transmission mechanism of monetary policy. It is therefore important that the Treasury keeps issuing bonds consistently, even though they may be well beyond its (now negligible) funding needs.

Most importantly – indeed, the objective of the enhanced communication – inflation is now expected to move down and then remain near its target, as shown in Figure 2.3, even though the current rate of inflation is above the forecast paths laid out in the Monetary Bulletins of July and December 2007. In contrast, the July 2006 Monetary Bulletin projected inflation to be diverging from its target, with a two-year ahead inflation forecast of nearly 6%.

The change in the Central Bank's inflation projections is also reflected in private sector expectations, to the extent that these can be inferred from the spread between indexed and non-indexed bonds. As Figure 2.6 shows, whereas breakeven inflation remained around 4% through mid-2006, it seems to have now stabilized near 2½ per cent. It should be noted that twice breakeven inflation rose above 3% in the second half of 2007, but the

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#### Figure 2.6. Breakeven inflation rate

- 1. Spread between the yield of the Treasury un-indexed bond maturing in 2013 and that of the Treasury inflationindexed bond maturing in 2015.
- 2. Spread between the yield of the Treasury un-indexed bond maturing in 2013 and that of the HFF inflation-indexed bond maturing in 2014.

Source: Central Bank of Iceland, Monetary Bulletin (2007-3), OECD Secretariat.

spikes do not seem due only to renewed concerns about inflation but also to a rising riskpremium on non-indexed bond associated to the turmoil in the global financial markets. In any case, the key point is that the stance of monetary policy is now perceived to be broadly on track, which clearly was not the case in mid-2006.

#### **Effectiveness: is monetary policy impotent?**

The persistence of strong growth and high inflation despite large increases in the Central Bank's policy rate has raised doubts about the ability of monetary policy to control the economy. Indeed, a number of academics, bankers and other economic observers have suggested that monetary policy is ineffective in Iceland. However, this view is not shared by most monetary experts, either within Iceland or internationally.

#### Estimates of the impact of monetary policy

One estimate of the effectiveness of monetary policy comes from the Central Bank of Iceland's new Quarterly Macroeconomic Model (QMM). Figure 2.7 shows the effect on GDP and inflation of a 1 percentage point increase in the monetary policy rate for one year. The figure is reproduced from Daníelsson *et al.* (2006, Chapter 10.5) where it is discussed in more detail. In brief, the policy tightening lowers real GDP by ¾ percentage point after about a year and lowers inflation by ¼ percentage point after two years. A larger and more sustained tightening would have proportionately larger effects.

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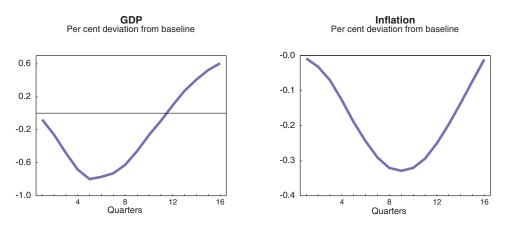


Figure 2.7. Response to 1 percentage point temporary increase in interest rate

Source: Daníelsson et al. (2006).

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These estimates are broadly in line with estimates for other countries, using a variety of different models and statistical techniques, as outlined in a comprehensive survey by Christiano *et al.* (1999). Essentially, a wide body of research, and the consensus of academic opinion, indicates that monetary policy is potent, although the flattening of the Phillips curve, in Iceland as elsewhere, has worsened the sacrifice ratio. In conclusion, the available empirical evidence indicates that there is no Icelandic exception: as in the rest of the OECD, monetary policy works even if, as discussed below, some qualifications apply.

#### The indexation argument

It is often argued that Iceland's unusual indexation of loans to inflation makes monetary policy less effective. Taken literally, this claim is difficult to understand. The responsiveness of activity and inflation to monetary policy in other countries is normally thought to be mainly a responsiveness to expected (or *ex ante*) real interest rates. In expectation, these will be the same as indexed (or *ex post*) real interest rates. There are identifiable nominal rigidities (for example, through interactions with the tax code), but these are minor. The main effect of indexation is to prevent unexpected redistributions of income from debtors to creditors. It is not clear how this, in itself, would significantly alter money multipliers. It might be argued instead that, since indexation reduces the damages caused by excessive inflation, the general public does not care as much about changes in the general price level. However, as argued in Chapter 3, this reduced preference for low and stable inflation, while it may induce actions on the part of the government that are at variance with the Central Bank mission, does not reduce *per se* the effectiveness of monetary policy.

#### The partial "euroisation" of the economy

Another issue of contention is whether the increased use of the euro in the Icelandic economy has substantially reduced the effectiveness of monetary policy. The academic literature defines partial dollarisation as the partial replacement of the domestic currency by a foreign currency, usually the US dollar, in its basic functions. As for Iceland the relevant foreign currency is the euro, its experience could be referred to as "euroisation".

For the moment, the issue is mostly limited to some financial and non-financial institutions using the euro for their account keeping. On the one hand, one can think of low-probability events stemming from this practice which may have serious consequences. For instance, banks could lower the supply of króna-denominated credit in order to boost the use of the euro as a medium of payment. However, supply of credit should continue to respond to demand for it. By itself, the switch to euro accounting should therefore make little difference to the effectiveness of monetary policy as long as transactions are still settled in króna, which would remain under the exclusive control of the Central Bank of Iceland. It should also be noted that domestic payment systems do not currently allow settlements in other currency than the króna. (See Portes and Baldursson, 2007, for a discussion of Icelandic firms using the euro as a listing currency).

If, instead, the euro were accepted as a medium of payment (which is known in the literature as transaction euroisation or currency substitution), the conduct of monetary policy could be substantially complicated. For instance (as explained in Central Bank, 2007c), if financial institutions were to settle their transactions in euros, this would likely reduce the issuance and the turnover of króna-denominated assets and thereby hamper the Central Bank in affecting interest rates across the yield curve. In addition, the euroisation of financial settlements would reduce the ability of the Central Bank to function as a lender of last resort, since bail-outs in foreign currency would be hardly feasible. In any case, as long the króna remained the dominant medium of payment of households and non-financial firms, monetary policy would continue to be, perhaps with some additional complications, an effective stabilisation tool.

By contrast, if the euro became the preferred currency to regulate domestic transactions, the Central Bank would lose much of its ability to influence the economy. In principle, currency substitution amplifies the effect of the foreign interest rate over domestic economic activity, hence weakening the interest rate channel of monetary policy. There are no episodes from the OECD which can be used to benchmark the effect of currency substitution in an advanced economy such as Iceland; in fact, currency substitution is a relatively rare occurrence, even in emerging market economies which have experienced hyperinflation. The Peruvian economy, which is estimated to have been 80% dollarized for over a decade, is a notable exception. Researchers at the Peruvian central bank have recently estimated a dynamic stochastic general equilibrium model to measure the effects of currency substitution, and have found that it noticeably lowered the impact of an interest rate change on output and consumption (Castillo *et al.*, 2006). On the other hand, it should be noted that in the past few years the Central Bank of Peru has successfully managed to keep inflation relatively close to 2.5%, the midpoint of its target range.\*

Summing up, euroisation does not seem to pose at the moment a credible threat to the effectiveness of monetary policy in Iceland. Indeed, it seems unlikely that Icelandic households and firms would unilaterally abandon the króna. On the other hand, it should be noted that that the economy's increased reliance on foreign-denominated borrowing

<sup>\*</sup> The literature also identifies another mechanism though which a foreign currency may supersede the domestic currency. Domestic-denominated prices could be indexed to variations in the exchange rate, which is known as price dollarisation (or euroisation). However, price dollarisation has only occurred in response to episodes of hyperinflation, which for the moment do not seem likely to re-occur in Iceland.

could have undesirable effects on financial stability, since it entails a greater exchange risk for domestic agents.

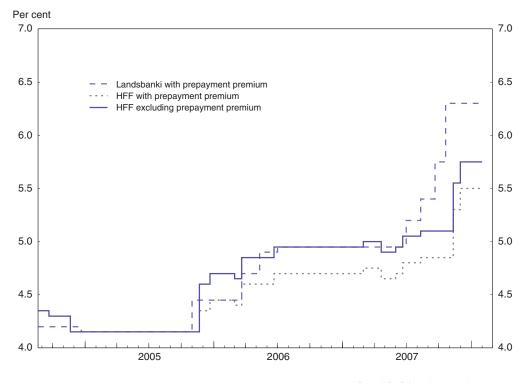
#### The "broken" mortgage rate channel argument

The more important argument is that monetary policy is less powerful when mortgage interest rates are typically fixed for long periods of time, as in Iceland, the United States, or many European countries, than it is in an economy where mortgages tend to adjust in line with variable interest rates, as in the United Kingdom or Australia. Indexation facilitates fixing interest rates for long periods, which may be the basis of the suggestion that indexation renders policy impotent. However, the issues are distinct and the correlation between indexation and fixed mortgages is not strong. There is a substantial literature on the effects of mortgage rate variability (see, for example, the Miles review of the UK mortgage market; Miles, 2004). Perhaps the most relevant conclusions of this literature are:

- Monetary policy multipliers are higher when mortgage rates are variable. This is mainly because high variable rates reduce the disposable income of borrowers. There is an offsetting increase in the disposable income of lenders, but these generically have a lower marginal propensity to consume.
- However, monetary policy is still powerful in economies with long-term fixed mortgage rates. See, for example, Figure 2.7 above, or the similar estimates of monetary policy multipliers for the United States (Brayton and Tinsley, 1996, Figure 3).
- The size of monetary policy multipliers is a relatively unimportant criterion to assess such institutional arrangements. Low multipliers increase the variability of interest rates but, if this risk is hedged, it is not a concern.
- Observers in countries with variable rate mortgages commonly argue that rates fixed for longer would be preferable.

Sceptics suggest that recent experience in Iceland is inconsistent with the view that monetary policy is effective. In particular, the large increase in the policy rate (Figure 2.1) has not been reflected in a commensurate increase in real long-term lending rates. In part, as in other OECD countries, this can be attributed to the "savings glut" and the hunt for high yields by large investors. However, besides these global trends, financial developments within Iceland also contributed to the disconnect between short- and longterm rates. The Housing Financing Fund (HFF), Iceland's main lender for housing, has managed to keep the mortgage rate nearly unchanged since the Central Bank began (slowly) raising the policy rate in May 2004. Back in 2004, with the policy rate at 5.2%, the HFF lending rate stood at 5.1%; more than three years later, in October 2007, the policy rate was brought to 13.3% but, as shown in Figure 2.8, the HFF lending rate was again at 5.1% (and a new mortgage with prepayment penalty was offered at 4.8%). Several commentators have inferred from this episode that policy rates have little, if any effect on mortgage rates, household demand for housing and for other goods and services, and overall economic activity.

This development is important because a positive effect of policy rates on mortgage rates is a central part of the transmission mechanism of monetary policy. For example, in the Central Bank's QMM simulations shown in Figure 2.6, it appears to constitute the single most important channel of influence. However, other channels also matter. These include effects through the exchange rate (the main channel of influence on inflation for the first six quarters), asset prices, and borrowing for purposes other than housing (for example,



#### Figure 2.8. Indexed mortgage rates

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Source: Housing Financing Fund, Landsbanki and Central Bank of Iceland.

consumption and business investment). That said, while a breakdown in this relationship between policy rates and mortgages may not render policy totally ineffective, it would substantially weaken it and would warrant a reassessment of the effectiveness of monetary policy.

Monetary policy can be considered to flow into mortgage rates through several steps, as shown in Figure 2.9. At each step, other influences also matter. For example, current policy, coupled with expectations of policy in the future, will determine medium- and long-term interest rates. Expectations of inflation then determine the effects of these on real interest rates. Lending margins will then translate wholesale interest rates into mortgages.

Variations in other influences can obscure the impact of monetary policy on mortgage rates. Indeed, a combination of various factors has essentially offset the past increases in the short-term policy rate. Expectations of declining short-term rates prevented long term nominal rates from rising initially. Then, expectations of rising inflation depressed real interest rates. Most importantly, financial market liberalisation led to a narrowing of lending margins, lowering real mortgage rates. These developments are discussed in the last *Survey* and in numerous Monetary Bulletins by the Bank of Iceland. Overall, most of these adverse shifts can be regarded as happenstances (with some qualifications, discussed below) that are unlikely to recur. In other words, it seems reasonable to presume that the relationship between policy and mortgage rates was temporarily offset, not permanently broken.

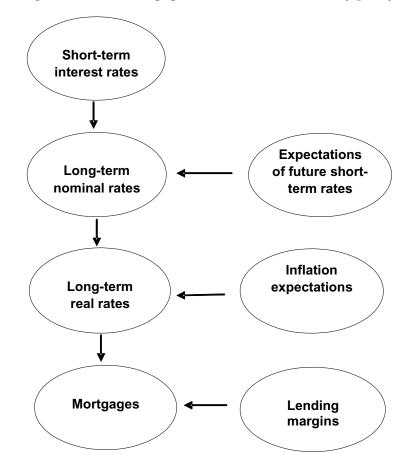


Figure 2.9. The mortgage rate channel of monetary policy

It should be noted that these other influences do not represent just noise, but also give rise to reverse causation. A reduction in lending margins, for example, will lower mortgage rates and hence stimulate demand and inflation, causing monetary policy to tighten, as has been the case in 2005. This simultaneity gives rise to the negative correlation between mortgage rates and policy rates evident in the data, even though the effect of policy rates on lending rates is positive.

Some of the influences referred to above are unrelated to monetary policy *per se.* In particular, the narrowing in lending margins can be attributed to financial innovation and changes in housing policy. However, other factors are subject to greater Central Bank control. In 2005 and early 2006, increases in the policy rate were not translated into longer-term rates. Financial markets expected the tightening in policy to be quite temporary, as reflected in a steep downward sloped yield curve. This greatly weakened the transmission mechanism. But, as discussed earlier in the chapter, more recent policy increases have been accompanied by clear Central Bank statements that the increase is likely to be sustained. Longer-term yields rose substantially in late 2007, partly in response to Central Bank's actions. In such a way, the transmission mechanism is not constant but something over which the monetary authority can exercise considerable influence. Indeed, improvements in transparency have allayed some concerns about ineffectiveness of monetary policy.

There are indeed encouraging signs that a more normal relationship between policy and mortgage rates has been restored. In the wake of the November rate hike, the HFF increased its lending rates to 5.55% and 5.3% (depending on repayment fees) and the rate offered by Landsbanki (a major Icelandic private bank) surged to 6.3% from 5.4% (Figure 2.8). More recent news provides further insights on how the enhanced communication framework could help monetary policy affect long-term interest rates. After growth and inflation continued to surprise on the upside late last year, yields on HFF bonds rose and the HFF had to raise further its lending rates to 5.75% and 5.5%, in part reflecting markets expectations of further tightening at an extraordinary December meeting of the Board of Governors. However, actions fell short of market expectations and the policy stance was left unchanged. In the wake of the news, yields on bonds immediately fell on average by 15 basis points, basically reverting the increase posted ahead of the meeting. This last episode well illustrates how the new framework can improve the transmission mechanism of monetary policy, but also that it cannot replace good policy decision.

Notwithstanding the increases in mortgage rates over the second half of 2007, the reform of the publicly-owned HFF should not be further delayed. As argued in Chapter 1 and in numerous previous *Surveys*, the HFF should be adequately charged for the guarantee the government provides or government backing of the Fund should be credibly terminated. The current set-up not only impedes the proper functioning of monetary policy, but also prevents fair competition in the mortgage market and distorts the economy by effectively providing a subsidy to the construction sector.

#### **Fine-tuning the framework**

The inflation-targeting framework adopted by the Central Bank of Iceland reflects in many ways best practice in monetary policy. In particular, in spite of limited resources, its analysis, forecasting and communication display remarkable competence and professionalism. Furthermore, the current policy stance seems appropriate and is indeed contributing to restore stability in the economy. And, the current framework should be maintained until inflation is brought back to target, since any early changes could prove counterproductive. There are nonetheless some features of the framework which could be refined over time to improve the effectiveness of monetary policy.

Keeping in mind these important qualifications, there are two aspects which could be fine-tuned. The recent debate about monetary policy in Iceland has been overly focused on the gap between actual and targeted inflation, in part a reasonable consequence of the magnitude and the persistency of the gap. However, monetary policy has no influence on contemporaneous inflation and, over time, it will be essential to refocus the discussion towards future inflation. This is especially true for a very small open economy such as Iceland, where inflation is inherently volatile and thus will frequently deviate from target. The Central Bank policy statements should put greater emphasis on inflation expectations, which, despite temporary movements in actual inflation, should always remain firmly anchored to target. Perhaps, it may be helpful to identify a simple indicator for underlying inflation pressures, which the Board of Governors can refer to explain its policy decision. Greater emphasis on inflation expectations, which are key to influencing long-term interest rates, would contribute to enhance the effectiveness of monetary policy.

Another, and perhaps more debatable, candidate for change is the targeted inflation measure. The Central Bank of Iceland targets a consumer price index which includes a housing component. Statistics Iceland computes such component as an annuity where the principal is the market value of the property, and the discount rate a relatively short moving average of recent interest rates on housing loans. The change in the housing price index is thus a function of the house prices and current mortgage rates. This user-cost approach for imputing the price of the service flow from owner-occupied housing has several shortcomings for the conduct of monetary policy under an inflation targeting framework. First, a growing body of academic research indicates that an inflation target should use measures of inflation which put more weight on prices which move sluggishly, and exclude asset prices such as housing (Aoki, 2001 and Woodford, 2003). While some policy makers have argued for "leaning against the wind" (ECB, 2005), the Central Bank seems to be having enough problems achieving its inflation target to credibly and effectively commit to the additional goal of preventing asset bubbles. Second, suppose mortgage interest rate were to consistently respond more to changes in the policy rate, perhaps because of a reform of the HFF. Under these circumstances, when the Central Bank hikes interest rates to contain inflation, it also pushes up its target measure of inflation since the higher interest rates boost the annuity derived from owning a house. This artificial increase in measured inflation would prompt the Central Bank to raise the policy rate further, and the resulting over-tightening would then lead to an unnecessary output decline. It should be noted that this is not just a remote theoretical possibility. In December 2007, the twelve-month rate of inflation rose to 5.9% from 5.2% in the previous month, and it is estimated that 0.1 percentage point of this increase can be accounted for by the impact of rising mortgage rates on imputed rents. Unfortunately, moving to a rental equivalence approach, as practiced in the United States and elsewhere in the OECD (Christensen et al., 2005), to impute owner-occupied housing would be difficult as the Icelandic rental market is extremely thin. Furthermore, given the importance of owneroccupied housing, removing it from the housing component of the price index may not be appropriate. A possible solution may be to lengthen the moving average used to compute the discount rate so that changes in the policy rate would take longer before they have an effect on housing component of the inflation index. In any way, the issue cannot be ignored and needs to be eventually addressed, perhaps in the context of related work at the European level carried out in the context of the harmonised consumer index. A final remark is that if the measure of inflation were changed, the target rate should also be revised accordingly.

In light of the confirmed effectiveness of monetary policy as an effective stabilisation tool, calls for unilaterally adopting the euro appear particularly misplaced. Leaving aside the more general considerations of whether Iceland is part of an optimal currency area within the euro zone, the loss of the lender of last resort provides a powerful argument against unilateral monetary union. In addition, the conversion to euros and the loss of seignoirage revenues would be costly for public finances. And, perhaps above all, the transfer of national sovereignty to the European Central Bank without political legitimacy would be unlikely to survive (Buiter, 2000). In conclusion, the only viable option for the adoption of the euro remains full membership in both the European Union and the European Monetary Union.

#### **Concluding remarks**

The Central Bank's communication strategy has greatly improved but arguably policymakers have continued to react too slowly to new information and to be overly optimistic about the inflation outlook, prompting speculation about the degree of independence of the Central Bank. Claims that monetary policy in Iceland is ineffective, nonetheless, do not appear well founded. While long-term rates did not always respond to changes in the policy rate, it seems that the relationship was only temporarily offset by a numbers of factors, some outside the control of the Central Bank. In particular, mortgage rates have risen substantially in the wake of the November increase in the policy rate. All in all, it now appears that the monetary policy stance is broadly on track, and inflation should recede if strong vigilance is maintained. Some policy recommendations to strengthen the implementation and the effectiveness of monetary policy are provided in Box 2.1.

#### Box 2.1. Recommendations regarding monetary policy

The restrictive monetary policy stance should be maintained to restore equilibrium in the economy until inflation expectations are solidly anchored to the policy target.

- The publication of the expected path of the policy rate should not prevent the Central Bank to appropriately respond to shocks. Interest rate decisions should be consistent with the reaction function illustrated in the preceding Monetary Bulletins.
- The Central Bank should guard in particular against second-round effects of a possible future deprecation of the currency.
- Members of government should show support for the independence of the Central Bank, as publicly criticising interest-rate setting decisions undermines its credibility and therefore reduces the effectiveness of monetary policy.
- Treasury should continue issuing government bonds, even if they are no longer needed to fund public expenditures, as they provide an important benchmark to price mediumand long-term debt of municipalities and corporations.
- Reform the public-owned Housing Financing Fund should not be further delayed: the current set-up distorts the allocation of resources and impairs the workings of monetary policy.

The inflation targeting framework could be refined once inflation has been credibly brought down to target.

- Put more emphasis on inflation expectations, so as to enhance the influence of monetary policy on long-term rates.
- Revise the methodology to impute the service flow of owner-occupied housing into the target measure of inflation.
- Iceland should join both the European Union and the European Monetary Union if it wants to switch to the euro. Unilaterally adopting the euro is not a viable alternative.

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The Secretariat's draft report was prepared for the Committee by Hannes Suppanz and Andrea de Michelis under the supervision of Patrick Lenain.

The previous Survey of Iceland was issued in August 2006.



### BASIC STATISTICS OF ICELAND

#### THE LAND

103	Unproductive area (1 000 sq. km)	82
21	of which:	
	Glaciers	12
1.1	Other area devoid of vegetation	67
20	-	

#### THE PEOPLE

312 872 Occupational distribution, 2007 (per cent)	
1.4 Agriculture	3.8
Fishing and fish processing	4.7
Other manufacturing	11.5
Construction, total	10.1
Trade	16.3
Transport and communication	7.1
Other services	59.6

#### PARLIAMENT AND GOVERNMENT

Present composition of Parliament	2007
Independence Party	25
The Alliance Party	18
Progressive Party	7
The Left-Green Movement	9
The Liberal Party	4
Last general election: 12th May 2007	

#### PRODUCTION AND CAPITAL FORMATION

Gross domestic product in 2006	5 Gross fixed capital formation in 2006		
ISK million	1 162 930	ISK million	387 992
Per head, US dollars	54 764	Per cent of GDP	33.4

#### FOREIGN TRADE

Exports of goods and services in 2006, % of GDP	32.2	Imports of goods and services in 2006, % of GDP	38.4	
Main exports in 2006 (% of merchandise exports)		Imports in 2006, by use (% of merchandise imports)		
Fish products	51.2	Consumer goods	20.2	
Aluminium	23.5	Capital goods and transport equipment	46.2	
Other manufacturing products	14.8	Industrial supplies	25.1	
Agricultural products	1.8	Fuels and lubricants	8.4	
Miscellaneous	8.7			
THE CURRENCY				

Currency units per USD, average of daily figures:<br/>Year 200764.1December 200762.4

Population, 31 December 2007 Net increase 1997- 2007, annual average, %

Area (1 000 sq. km)

Cultivated area Rough grazings

of which:

Productive area (1 000 sq. km)

Monetary unit: Króna

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