

**Governor Nils Bernstein's statement
at the Conference
"Experience with and Preparations for the Euro"
to be held from 10 to 12 May 2006 at the Raiffeisen
Landesbank Oberösterreich in Linz, Austria**

**Session 2: A View from the Outside – Effects on the Introduction of the
Euro**

It is a great pleasure and honour to have been invited to give a view from an out-country on the effect of the introduction of the euro. Conferences like this offer an excellent opportunity for mutual exchange of experiences and discussion of issues related to monetary policy and financial sector developments. I will focus my statement on the effect of the euro for Denmark on four topics: Monetary policy, financial integration, trade integration and the requirements for fiscal policy and other economic policies. Finally, I will summarise our experience with the euro as the nominal anchor for inflation expectations within the Danish fixed-exchange-rate regime.

First, let me describe the effects of the introduction of the euro on *monetary policy* in Denmark. Denmark maintains a fixed-exchange-rate policy vis-à-vis the euro area. Since the start of the third stage of the Economic and Monetary Union in the EU on 1 January 1999, the formal framework for the fixed-exchange-rate policy has been the European Exchange-Rate Mechanism, ERM II. Denmark participates in ERM II with a narrow fluctuation band of +/- 2.25 per cent around the central rate. The central rate is a conversion of the central rate of the krone vis-à-vis the D-mark in the previous European Exchange-Rate Mechanism (ERM I), and the central parity of the Danish krone vis-à-vis the anchor has now been unchanged for more than 19 years.¹

Due to this long-standing experience with a firm fixed-exchange-rate policy, the introduction of the euro has not implied any major changes for the overall monetary-policy framework in Denmark. During its more than seven years of existence, the euro has served as a stable nominal anchor for the inflation expectations in Denmark. The fluctuations in the krone vis-à-vis the euro are now so moderate that most ordinary households and business enterprises no longer take them into consideration. On average, prices on retail goods have been broadly constant for a long period.

¹ The monetary policy in Denmark is described in details in Danmarks Nationalbank (2003), *Monetary Policy in Denmark*.

During most of the ERM I period the D-mark was the nominal anchor of the Danish economy, and Germany has been Denmark's largest single export market since the late 1970s. Even though a number of other European currencies were closely pegged to the D-mark during the ERM I period, the introduction of the single currency in replacement of 12 national currencies has made the anchor more clearly visible for Danish households and business. The euro has a weight of more than 50 per cent in the effective krone-rate index compared to just above 20 per cent for Germany alone. It may also be argued that the anchor was more diffuse during the ERM I period due to the multilateral nature of the system and the widening of the fluctuation bands to +/- 15 per cent in 1993. The ERM II is a so-called "hub and spokes" model where each participating currency has a central parity vis-à-vis the euro but not vis-à-vis the other participating currencies as they did in ERM I. Together with the narrow Danish +/- 2.25 per cent fluctuation band the introduction of the euro and the transition from ERM I to ERM II have therefore made the communication of the fixed-exchange-rate policy somewhat easier.

Since the introduction of the euro in 1999 the krone has been stable against the euro, close to the central rate, and it has been possible to stabilise the krone with relatively limited use of interventions in terms of both frequency and amounts. During the most recent years the monetary-policy interest rate spread has amounted to 15-25 basis points. The long-term yield spread between Denmark and Germany has virtually disappeared and even been negative in some periods. Anecdotal evidence indicates that the participants in the foreign-exchange market often take positions in the expectation of a stable krone. This contributes in itself to a stable exchange-rate development and confirms the credibility of the Danish fixed-exchange-rate policy and stable economic conditions.

Let me now turn to the second topic, *financial integration*. The introduction of the euro has acted as catalyst for a renewed interest in financial integration in Europe – both within the euro area and between the euro area and the non-participating EU countries. However, even though the euro area is clearly Denmark's most important trading partner there has been no sign of currency substitution in Denmark. By the end of 2005 euro-denominated deposits accounted for less than 0.2 per cent of the resident households' total deposits in the Danish banking sector. Tourists can though normally make their payments in euro in Danish shops without paying unfair margins.

The mortgage-credit institutes offer euro-denominated loans, but these loans accounted only for 5 per cent of the total volume of outstanding domestic mortgage-credit loans at end-2005. This should probably be viewed in light of the low interest-rate differential between Denmark and the euro area. At low interest-rate spreads, the Danish households and firms apparently find it more convenient to borrow in their base currency, i.e. in Danish kroner, since this is the currency denomination of the households' wages and salaries.

The last decade or so has also been characterised by some significant changes in the structure of the Danish credit-institute sector.² The Danish mortgage-credit system has been transformed from a system based mainly on long callable fixed-interest rate mortgages to a system with many different types of loans and a high share of adjustable-rate mortgages. However, the driving forces behind this development have been liberalisations and increased domestic competition. It does not seem in any significant way to be related to the introduction of the euro and the Danish fixed-exchange-rate policy vis-à-vis the euro.

The period since the introduction of the euro has also witnessed a number of major cross-border mergers involving Danish banks. In 1997, the Swedish Nordbanken and the Finnish Merita formed a group into which the Danish Unibank and the Norwegian Christiania Bank were included in 2000. In 2001 the group was renamed "Nordea". Nordea has considerable market shares in Denmark, Norway, Sweden and Finland and is by most standards the second largest banks in Denmark. Furthermore, in 2001 Svenska Handelsbanken acquired the Danish Midtbank, and in 2004 the Icelandic Kaupthing Bank acquired the Danish bank FIH. There has also been an increased internationalisation of the Danish banking sector through the establishment abroad of branches and subsidiaries of Danish banks. Danske Bank acquired for instance the Swedish Östgöta Enskilda Banken in 1997 and the Norwegian Fokus Bank in 1999, and in 2004 Danske Bank entered into an agreement to purchase National Irish Bank (based in Ireland) and Northern Bank (based in Northern Ireland).

The increased international representation in the Danish Banking sector has until now mainly involved banks from the Nordic countries. Among the Nordic countries only Finland is a member of the euro area. Sweden is a member of the EU, but is not a member of ERM II, and Norway and Iceland are not members of the EU at all. The structural changes in the Danish banking sector during the last decade do therefore not seem to be related to the introduction of the euro in any significant way. Rather, the development has been driven by some of the "traditional" factors that motivate cross-border mergers and acquisitions in the banking industry such as cost reductions due to scale economies.

In view of the still relatively low level of cross-border mergers and acquisitions activity within the euro area-banking sector in general, the absence of major cross-border mergers into the Danish banking sector by euro area banks does not appear to be a result of Denmark being outside the euro area. Nor are there any indications that the level of financial integration as measured by the development in the number of branches and subsidiaries of foreign banks is lower in Denmark than in the euro area.

² Cf. Thomsen, J. (2005), Experience of Danish Credit Institutions in ERM2, *Bančni vestniks Journal for Money and Banking*, vol. 54, July-August, pp. 78-82.

My third topic is the effect of the euro on *trade integration*. Empirical evidence suggests that launch of the single currency has increased the intra-euro area trade.³ Furthermore, there are no indications that the euro area member states are trading less with countries in the rest of the world. However, due to the relatively short time span since the introduction of the euro such empirical studies should always be interpreted with caution.

In theory one should expect the introduction of the euro has also had a positive effect on the Danish export sector. The unification of 12 currencies into a single currency has reduced the exchange-rate uncertainty and other costs faced by the Danish exporters.

Danish hourly wage costs are among the highest in the world, and the gap to Denmark's competitors has widened in the last decade. Despite of this, exports have fared well, and in 2005 Denmark had a surplus equivalent to around 5 per cent of GDP on external trade in goods and services.⁴ This is also a large surplus by international standards. The current-account surplus, which in addition to goods and services includes interest on the external debt and current transfers, showed a surplus of around 2.5 per cent of GDP in 2005.

However, it is difficult to trace any effect of the introduction of the euro on Denmark's foreign-trade relations due to some other major structural tendencies. Denmark operates one of the world's largest merchant fleets, and the sea freight exports have more than doubled in less than ten years. Shipping is now the second-largest export sector after the manufacturing industry.⁵ An increased production of oil and gas from the Danish North Sea fields also contributes significantly to the surplus on the balance of goods and services.

My last topic is the *requirements for fiscal policy and other economic policies* under a fixed exchange-rate regime vis-a-vis the euro. A fixed-exchange-rate policy implies that the stance of monetary policy is from time to time out of line with domestic short-term cyclical needs. When the key monetary-policy interest rates in Denmark are closely linked to euro-area interest rates, there is no room for domestic stabilisation by means of monetary policy. This problem might appear particularly severe in Denmark, where the business cycle during the last two decades or so often seems to have been negatively correlated with the cyclical conditions in Germany and the euro area. However, in light of the consistent Danish fixed-exchange-rate policy it is also possible to draw a completely opposite conclusion: cyclical divergence is immaterial to the success of a

³ Cf. e.g. the survey in Pedersen, A. M. (2004), Currency Unions and Foreign Trade, *Danmarks Nationalbank Monetary Review*, 2nd Quarter, pp. 35-50.

⁴ Cf. Beier, N. C. and Pedersen, E. H. (2005a), Wages, Competitiveness and the Balance of Payments, *Danmarks Nationalbank Monetary Review*, 1st Quarter, pp. 43-60.

⁵ Cf. Beier, N. C. and Pedersen, E. H. (2005b), Sea Freight and the Danish Economy, *Danmarks Nationalbank Monetary Review*, 4th Quarter, pp. 41-56.

fixed-exchange-rate policy provided that the fiscal policy and other economic policies are in line with the requirements of a fixed-exchange-rate regime.⁶

In the Danish case two fairly general experiences has been seen regarding the relationship between monetary policy and fiscal policy in a fixed-exchange-rate regime: First there has been an unconditionally willingness to subordinate monetary policy to the exchange-rate strategy in order to get a stable exchange rate. Secondly a medium-term horizon in the annual fiscal budget planning process without ad hoc based and short-sighted changes in the fiscal policy contributes to an environment that is supportive to the fixed-exchange-rate policy.⁷

Denmark is subject to the objectives and requirements of the Stability and Growth Pact on equal terms with euro area member states, although no sanctions are imposed in case of non-compliance. However, being a satellite – and not the core – within the European exchange-rate cooperation, the fiscal policy in Denmark has to be at least as prudent – if not even more – if a credible fixed-exchange-rate regime is to be maintained.

Today the macroeconomic fundamentals of the Danish economy are sound and fairly robust: Low inflation, surpluses on the current account as well as on the general government budget, and a relatively low level of unemployment. However, this has not always been the case! Today's firm commitment to a fixed exchange rate in Denmark has its background in bad macroeconomic policies and, consequently, poor performance of the Danish economy in the 1970s and the beginning of the 1980s. It was the switch to a stability-oriented fiscal policy and a firm fixed-exchange-rate policy during the 1980s that let the Danish economy on a path of stable economic development as well as low and stable inflation.⁸

The political situation in the 1970s was characterised by frequent elections and short-term orientation of the macroeconomic policy. This resulted in a stop-go nature of the fiscal policy with frequent "packages". When the first oil crises came in 1973 Denmark had already experienced a deficit on the current account of the balance of payment for each consecutive year since 1963 leading to a limited room of manoeuvre in economic policy. Furthermore, the labour market system was based on automatic inflation indexation of wages. This implied a more or less direct feed of the oil price shocks into wages and prices. The 1970s saw a broad range of economic policy interventions, but without clear success. Unemployment was increasing rapidly⁹, government deficits were approaching 10 per cent of GDP, the balance of payments deficit persisted, and inflation was running at double-digit numbers. In principle, a fixed-exchange-rate policy was

⁶ Cf. Jensen, H. F. (2001), *Costs and benefits of ERM II: The Danish experience*, in: National Bank of Poland (2001), *The Polish Way to the Euro*, Conference 22-23 October 2001, pp. 252-262.

⁷ Cf. the background paper "The relationship between fiscal policy and monetary policy in a fixed exchange rate regime" to the speech given by Governor Jens Thomsen at the Central Bank of Cyprus on 24 November 2003.

⁸ An elaboration of the origin of today's fixed-exchange-rate regime in Denmark is found in Christensen, A. M. and J. Topp (1997), *Monetary policy in Denmark since 1992*, in: Monetary policy in the Nordic countries: Experiences since 1992, *BIS Policy Papers*, No. 2, pp. 5-23.

⁹ In particular if one abstracts from an early retirement scheme introduced in 1979.

pursued within the European exchange-rate co-operation, but the krone was devaluated several times against the Deutsche mark during the second half of the 1970s and the early 1980s. Therefore, *de facto* the exchange rate did not serve as the economy's "nominal anchor". As the result of high inflation and lack of credibility, long-term central-government interest rates reached more than 20 per cent in the beginning of the 1980s and the long-term interest-rate differential between Denmark and Germany was above 10 per cent. The government debt increased rapidly, and a fear that Denmark was on the verge to "state bankruptcy" began to rise.

In the early 1980s, a radical change in policies took place after a shift in government. In relation to a change of government in September 1982 the incoming government declared that devaluation would no longer be considered as an economic-policy instrument. This was subsequently followed by a significant tightening of the fiscal policy and an abolition of the automatic cost-of-living adjustment of wages. The promise to pursue a firm fixed-exchange-rate policy was soon put to a serious test when Sweden – one of Denmark's largest trading partners – devalued its currency by 16 per cent one month later. Denmark did not devalue. This and the other tightening measures meant that the credibility of Denmark's fixed-exchange-rate policy was soon enhanced.¹⁰ In the following years the government budget improved, and the inflation and interest-rate differentials to Germany fell significantly.

The medium-term horizon in the Danish fiscal policy framework during the last two decades or so has been crucial for the conduct of the fixed-exchange-rate policy. The discretionary fiscal policy measures carried out within this framework have also often contained elements of structural policy. Hereby consideration has been taken to both the short-term macroeconomic stabilisation as well as to the medium-term and long-term growth-potential of the economy. The most important permanent structural element during the second half of the 1980s was a tax reform that lowered the tax on capital income – positive or negative – and thus the value of the full deductibility of interest payments.¹¹

Other economic policies have also contributed to a more flexible economy with better incentive structures. During the period 1994-2000 several labour market reforms has played an important role in reducing structural unemployment. The reforms have effectively reduced the maximum-benefit-duration period from 8-9 years in 1994 to 4

¹⁰ It should be mentioned that the transition to a firm fixed exchange rate policy in Denmark was not fully completed until 1987. The Deutsche Mark was revalued several times within the ERM in the period 1983-1987, including vis-à-vis the krone, but not on the initiative of Denmark. Since 12 January 1987 there has been no change in the central rate of the krone vis-à-vis the D-mark and subsequently euro.

¹¹ Before the tax reform in the mid-1980s (effective from 1987) the tax value of interest rate deductions were up to 73 per cent. After the maximum tax value of interest rate deductions was lowered to 51 per cent. A further reduction of the tax deductibility of interest payments was implemented during the 1990s. The tax value of interest rate deductions reached the current level of 33 per cent in 2001.

years in 2000. Furthermore more intensive use of activation measures (job training and education for unemployed, etc.) has been implemented.¹²

Let me finalise this speech by *concluding* that the introduction of the euro has been successful and that the ERM II works well as the formal framework for the Danish fixed-exchange-rate policy. In practice Danish business and Danish trade unions have become perfectly aware that Denmark is in a price stability environment that is anchored by ERM II-participation. A few may even know the ECB's definition of price stability. More will know that the objective of price stability is taken serious by the ECB. For the past 15 years or so inflation in Denmark has been in accordance with this definition without an independent monetary policy to support it and with a fiscal policy that is medium-term oriented and sound as well, but normally not geared to manage short term inflation objectives. In short scientific language: ERM II has helped anchoring inflation expectations at 2 per cent.

Thank you very much for your attention.

¹² Cf. Gaard, S. and Kieler, M. (2004), *Two decades of structural reform in Denmark: a review*, Oesterreichische Nationalbank 32nd Economic Conference, May 27 and 28, Vienna.