

# STAFF MEMO

## Exchange rate regimes in Norway 1816-2016

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EXCHANGE RATE REGIMES  
IN NORWAY 1816-2016

# Exchange rate regimes in Norway 1816-2016

RAGNA ALSTADHEIM\*

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## Abstract

An overview of exchange rate regimes in Norway since 1816 is provided in a table which is divided into five sections; corresponding to the parts of the Norwegian monetary history defined and discussed in Eitrheim, Klovland and Øksendal (2016). Measured by the frequency of formal regime changes, the two parts of history before World War I were the two most stable. Several years pass between each regime change, and nominal stability was first established and then maintained. Long lasting formal regime stability was due to the absence of large external shocks to the economy. It was also due to a modest expected role for economic policy during the periods of domestic economic stress that the country experienced. Wars and large terms of trade shocks, in addition to growing ambitions regarding policy contributions to domestic economic stability, resulted in more frequent formal regime changes during the next two parts of Norwegian monetary history, covering the period from 1914 to 1986. This period of time was also characterized by nominal volatility. Finally, the "long return" to monetary stability in the most recent period after 1986 has simultaneously represented a return to fewer formal regime changes.

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\*The first version of this overview appeared more than two decades ago in an appendix to Qvigstad and Skjæveland (1994) (in Norwegian), which was published in a Festschrift in honour of previous Norges Bank Governor Hermod Skånland. The present overview is a translated and slightly edited and extended version of the original table. I thank Veronica Harrington for her translation and Øyvind Eitrheim for comments. Any remaining errors are my own. The table also appears in Eitrheim, Klovland and Øksendal (2016, Chapter 1).

# 1 Exchange rate regimes in Norway 1816-2016

*Exchange rate regimes 1816-2016*

Date	Adjustment	Commentary
<b>Part I</b>		<b>The long promise, 1814-1850</b>
14 Jun 1816	The speciedaler is introduced as monetary unit, divided into 120 skilling or 5 riksort. The speciedaler floats freely.	The Norges Bank Act and the acts relating to the Monetary System were adopted. An eighty-year-long period of inflation had just ended. After hyperinflation in Denmark–Norway during the Napoleonic Wars, the krone was sharply devalued in 1813, 1814 and 1816. A silver fund was established. Contributions were initially voluntary, but were then made compulsory in the form of a silver tax. The speciedaler was expected to be fully redeemable in silver by 1819.
13 Aug 1818	The promise to make speciedaler convertible is suspended.	The revised Norges Bank Act of 13 August 1818 implied that the promise of making speciedaler redeemable in silver by 1819 was broken. The revised act did not specify any exact date for reintroducing convertibility and the exchange rate depreciated rapidly during the following years.
1 Jan 1823	Speciedaler is steered towards silver parity.	On 15 November 1822, the Storting decided to start silver redemption at a rate close to the prevailing market rate, at that time around half of the promised silver value. It took until 1842 before <i>the long promise</i> of silver redemption at par was fulfilled, twenty-six years after the promise had been given.
23 Apr 1842	Speciedaler notes become linked to silver at the promised parity rate.	Currency interventions in the modern sense of the phrase did not exist. When the speciedaler came under pressure in 1843, Norges Bank brought all lending to a halt. This was also Norges Bank's response to the international crisis in 1847-1848, in addition to suspending silver exchange except at the head office in Trondhjem. In the crisis of 1857-1858, Norges Bank supported the currency by dispatching a cargo of silver to Hamburg as collateral promoting the discounting of bills and notes issued by Norges Bank and Norwegian debtors.

*Exchange rate regimes, 1816–2016 (cont'd)*

Date	Adjustment	Commentary
<b>Part II</b>		
<b>The rise of private deposit taking banks, 1850-1914</b>		
1 Jan 1874	Transition from silver standard to gold standard. The speciedaler is divided into 4 kroner instead of 5 riksort.	The US and France had both adopted a silver standard, with the value of gold coins expressed in silver (bimetallic standard). An international monetary conference in Paris in 1867, where Norway participated, recommended an agreement based on the gold standard. The objective was two-fold: to stabilise monetary value (gold was regarded as more stable than silver) and to establish an international system of fixed exchange rates against gold.
16 Oct 1875	Norway joins the Scandinavian Currency Union. The currency unit is now the krone, which is divided into 100 øre.	A joint commission for the three Scandinavian countries was appointed in 1872 to discuss a proposal for a joint Scandinavian currency based on gold. The Scandinavian Currency Union was established by Denmark and Sweden on 27 May 1873, with Norway initially remaining outside. Within the Scandinavian Currency Union, the Swedish and Danish krone would be legal tender in Norway on par with Norwegian coins. Although the Scandinavian Currency Union no longer had much practical significance after 1914, it was not formally revoked until 1972.
<b>Part III</b>		
<b>World war I and turbulent interwar years, 1914-1940</b>		
5 Aug 1914	Gold convertibility suspended from this date and krone allowed to float.	World War I. Embargo on gold and silver exports. The number of notes in circulation quadrupled in the years 1914-1918. The value of the krone nevertheless rose as a result of the strong increase in freight earnings for the Norwegian merchant fleet.
8 Mar 1916	Gold convertibility restored, but krone still floating.	Inflation and a large volume of goods imports after the war led to a loss of confidence in the krone, which fell sharply in value. The krone fell below par in May 1919, rose again from 1924 and was back at par (prewar value) against the pound sterling in 1926.

*Exchange rate regimes, 1816–2016 (cont'd)*

Date	Adjustment	Commentary
19 Mar 1920	Gold convertibility suspended again, and krone floating.	Inflation and a large volume of goods imports after the war led to a loss of confidence in the krone, which fell sharply in value. The krone fell below par in May 1919, rose again from 1924 and was back at par (prewar value) against the pound sterling in 1926.
1 May 1928	Krone pegged to gold at par, gold standard reintroduced.	The krone was pegged to gold by Royal Decree of 19 March 1928. The embargo on gold exports was lifted, but only for countries that freely redeemed their currencies for gold.
27 Sep 1931	Gold standard abandoned and krone allowed to float.	Britain abandoned the gold standard on 20 September 1931. Norway and the other Nordic countries followed suit. The aim was to prevent harmful fluctuations in the krone exchange rate, but no-one knew what to stabilise the krone against.
June 1933	Adoption of fixed krone exchange rate against the British pound sterling.	A fixed rate of NOK 19.90 to the pound was adopted, although this did not imply any link to gold as Britain had left the gold standard. (The exact date for the adoption of the fixed rate is unavailable.)
29 Aug 1939	Fixed krone exchange rate against the US dollar.	As the US dollar was pegged to gold at this time, Norway returned in practice to a gold standard. The exchange rate was NOK 4.40 to the dollar.
<b>Part IV</b>	<b>Times of war, central planning and regulation, 1940-1986</b>	
22 Apr 1940	World War II.	The lawful Norwegian government dismissed Norges Bank's board of directors and appointed a new board. Effective from 7 June 1940 Norges Bank was located in London, thereby effectively disabling the German-controlled Norges Bank in Norway. Norges Bank London maintained a fixed exchange rate for the so-called London krone at NOK 17.70 to the pound.

*Exchange rate regimes, 1816–2016 (cont'd)*

Date	Adjustment	Commentary
22 Apr 1940 (cont'd)	World War II (cont'd).	Gold and other international assets were under the control of Norges Bank London. German Reichskreditkassenscheine bank notes were made legal tender in Norway by the occupier. They were, however, in practice only used during the first weeks of occupation, since Norges Bank soon accepted unlimited funding of the German needs by supplying bank notes denominated in kroner.
15 Sep 1946	Norway joins the Bretton Woods system of fixed exchange rates.	The agreement to establish the International Monetary Fund (IMF), drawn up at the Bretton Woods Conference in July 1944, where Norway participated, was adopted by the Storting on 19 December 1945. The krone's par value in terms of gold corresponded to a rate of NOK 20.00 to the pound and NOK 4.03 to the dollar. The maximum permitted fluctuation was 1 per cent.
18 Sept 1949	Krone follows pound and is devalued by 30.5 per cent against the dollar.	A devaluation of the pound sterling triggered devaluations of a number of European currencies. The krone's new target rate against the dollar was NOK 7.14. When the pound was devalued on 18 November 1967, however, Norway maintained the krone's par value against the dollar (and gold).
15 Aug 1971	Bretton Woods system of fixed exchange rates collapses and krone allowed to float.	Gold convertibility was suspended in the US, and Norges Bank's obligation to purchase gold was temporarily revoked. Efforts would be made to keep fluctuations between the Norwegian krone and other currencies within moderate limits.
21 Dec 1971	New fixed exchange rate system introduced (the Smithsonian Agreement). Krone devalued by 1 per cent.	The IMF member countries decided to re-establish the system of fixed exchange rates with new parities and fluctuation bands of 2.25 per cent. Norway signed the Agreement and followed the lead of Sweden and Denmark in devaluing the currency by 1 per cent.

*Exchange rate regimes, 1816–2016 (cont'd)*

Date	Adjustment	Commentary
23 May 1972	Norway joins the European <i>snake in the tunnel</i> monetary cooperation.	The <i>snake in the tunnel</i> monetary cooperation limited the fluctuations between European currencies to half of the bandwidth, or the tunnel, in the Smithsonian Agreement. The combination of the European monetary cooperation and the Smithsonian Agreement was known as the <i>snake in the tunnel</i> .
12 Mar 1973	Smithsonian Agreement breaks down.	The European <i>snake</i> continued, with Norway's participation. The fluctuation bands were increased to 2.25 per cent. This meant that there was a floating exchange rate between the krone and the US dollar and other currencies outside the <i>snake</i> .
16 Nov 1973	Krone revalued by 5 per cent within <i>snake</i> .	The aim of revaluing the krone was to curb strong export and import price inflation. The adjustment was made following a period of substantial buying pressure on the krone and was a unilateral Norwegian measure.
18 Oct 1976	Krone devalued by 1 per cent within <i>snake</i> .	The adjustment was part of a larger realignment within the <i>snake</i> , following considerable exchange rate turbulence in autumn 1976 owing to differences in price and cost inflation across countries.
4 Apr 1977	Krone devalued by 3 per cent within <i>snake</i> .	The adjustment of the krone was part of a <i>snake</i> realignment in the light of differences in price and cost inflation.
29 Aug 1977	Krone devalued by 5 per cent within <i>snake</i> .	The adjustment was preceded by Sweden's exit from the <i>snake</i> and its devaluation of the Swedish krone by 10 per cent. The Danish krone was also devalued alongside the Norwegian krone.
13 Feb 1978	Krone devalued by 8 per cent within <i>snake</i> .	The adjustment was a unilateral Norwegian measure to address the high cost level in Norway relative to other countries combined with a deterioration in the outlook for Norway's current account balance.



*Exchange rate regimes, 1816–2016 (cont'd)*

Date	Adjustment	Commentary
16 Oct 1978	Norway does not join in when other <i>snake</i> currencies are revalued.	The German D-mark, Belgian franc and Dutch guilder are revalued by 2-4 per cent within the <i>snake</i> , while the Norwegian (and Danish) krone remain unchanged.
12 Dec 1978	Norway leaves the <i>snake</i> . Krone linked to a trade weighted basket of currencies.	The exchange rate index was initially calculated as an arithmetic average, with bilateral trade weights and base rates equal to the average exchange rates in August 1978. The level of the krone exchange rate was not changed when the transition was made to the currency basket system. Fluctuation margins were not published, but the krone remained in practice within a margin of $\pm 2-3$ per cent.
2 Aug 1982	Weights in the krone exchange rate index changed while retaining base exchange rates. Results in a downward adjustment of the krone by about 3.5 per cent given the prevailing exchange rate relationships.	The new weights were based on IMF weights for export industry competitiveness. The US dollar weight was reduced from 25 to 11 per cent, counteracting the loss of competitiveness due to a rising dollar.
6 Sep 1982	Krone devalued by 3 per cent.	The krone was devalued by adjusting the base exchange rates, and the devaluation was part of economic policy for 1983. The primary aim was to improve business sector competitiveness.

*Exchange rate regimes, 1816–2016 (cont'd)*

Date	Adjustment	Commentary
2 July 1984	Transition from arithmetic to geometric average for calculation of krone exchange rate index. Base rates kept unchanged. Results in a downward adjustment of the krone by about 2 per cent given the prevailing exchange rate relationships.	The primary reason for the adjustment was that the rising US dollar had resulted in an unintentional increase in the dollar's effective basket weight. When a geometric average is used, nominal and effective rates coincide.
22 Sep 1984	Decision to keep the krone exchange rate index at a level about 2 percentage points higher than previously, for the time being. The target rate remains unchanged and the krone is kept within the current fluctuation margins. In practice, the fluctuation band narrows.	The change was introduced in an effort to counteract the effects of what was considered a temporary US dollar appreciation on competitiveness for Norwegian firms in non-dollar markets.
9 Aug 1985	Fluctuation margins at 2.25 per cent are publicly disclosed.	The krone exchange rate system was formalised in the regulation of 12 August 1985. The target value was set at 100, but with the aim of keeping the krone weak and within the band, the exchange rate was normally between 101.13 and 102.25.
11 May 1986	The target value of the exchange rate index is changed from 100 to 112, resulting in a depreciation of the krone by 9.2 per cent from the 1985 level.	The adjustment was made because of a sharp reversal from a current account surplus to a deficit, partly as a result of lower oil prices and partly due to strong growth in domestic demand and lost cost competitiveness. The adjustment followed a period of substantial interventions by Norges Bank to counteract a depreciation of the krone.

*Exchange rate regimes, 1816–2016 (cont'd)*

Date	Adjustment	Commentary
<b>Part V</b>		
<b>The long return, 1986-2016</b>		
2 Dec 1986	Norges Bank decided to raise its key policy interest rate from 14 to 16 per cent to stabilise the krone exchange rate.	The authority over the key policy interest rate had been returned to the central bank.
22 Oct 1990	Krone pegged to the European currency unit (ecu).	The government aimed to link the krone more closely to the European Monetary System (EMS). Norges Bank established swap agreements that gave access to short-term credit for intervention purposes up to a total of ecu 2 billion from European Community (EC) central banks.
10 Dec 1992	Norwegian krone allowed to float. A royal decree of 8 January 1993 confirmed the floating exchange rate regime.	Earlier in the autumn, the British pound, Italian lira, Finnish markka and Swedish krona were allowed to float after persistent and substantial pressure. The Norwegian krone eventually came under such intense pressure that the fixed exchange rate could no longer be maintained. The government's objective was to return to a fixed exchange rate when international conditions permitted.
6 May 1994	A new exchange rate regulation was given in a royal decree. In practice a managed float regime.	Norges Bank's conduct of monetary policy was to be aimed at maintaining a stable krone exchange rate against European currencies, based on the range of the exchange rate maintained since the krone was floated on 10 December 1992.
10 Jan 1997	Norges Bank discontinued interventions temporarily.	Following a considerable appreciation pressure against the krone, Norges Bank intervened massively in the first days of January 1997. Interventions to stabilise the exchange rate were resumed in June 1997.
24 Aug 1998	Norges Bank discontinued interventions temporarily.	Norges Bank increased the interest rate to 8 per cent and announced that there would be no further changes in monetary policy instruments for the time being. Interventions to stabilise the exchange rate were resumed in October 1998.

*Exchange rate regimes, 1816–2016 (cont'd)*

Date	Adjustment	Commentary
1 Jan 1999	Norges Bank started to use the euro as indicator of the krone's value against "European currencies".	The euro was introduced as a common currency in 11 EU countries.
4 Jan 1999	De facto inflation targeting.	The de facto introduction of inflation targeting in Norway is usually associated with Svein Gjedrem taking over the helm as governor of Norges Bank in January 1999.
29 Mar 2001	De jure inflation targeting, with a target of 2.5 per cent over time, was introduced. A floating exchange rate regime replaced the managed float regime of the 1990s.	In addition to this codification of the inflation targeting regime, an operational fiscal policy rule was also introduced: all oil revenues should be channelled to the sovereign wealth fund, to be invested abroad. As a benchmark rule, only the real return of the fund (estimated at 4 per cent) should be used annually, as an average over time.

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