

The effects of trade liberalisation on clothing prices and on overall consumer price inflation

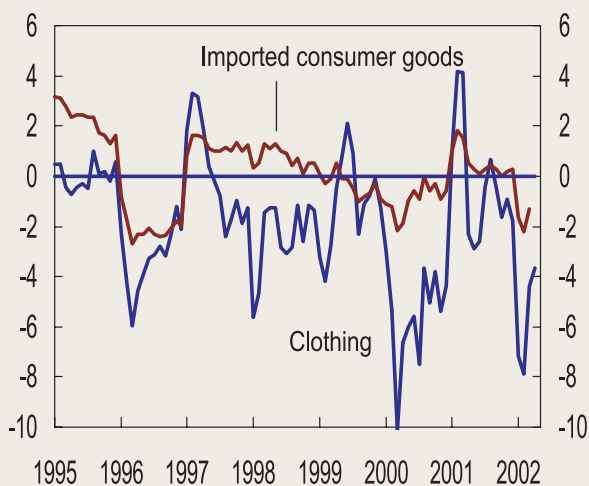
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Clothing prices, as measured in the consumer price index, are about 15 per cent lower today than they were in 1995. This fall in prices has contributed to curbing overall consumer price inflation. Developments in clothing prices must be viewed in the light of trade liberalisation. A gradual removal of quota restrictions and dismantling of tariff barriers have contributed to a marked increase in imports of clothing from low-cost countries at the expense of imports from the EEA. In addition, lower tariff rates have contributed directly to lower prices for clothing in Norway. A quantification of these relationships has made an important contribution to both explaining the low imported price inflation of recent years and improving the basis for estimating future price inflation.

1 Background

In recent years the rise in prices for imported consumer goods has been low, and at times negative (see Chart 1). This is largely due to the fall in prices for clothing, which for the most part is imported. Since 1995, clothing prices have fallen by a total of 15 per cent¹⁾. This corresponds to an annual average fall in prices of over 2 per cent from 1995 to 2002. By way of comparison, the average rise in overall consumer prices was about 2½ per cent in the 1990s.

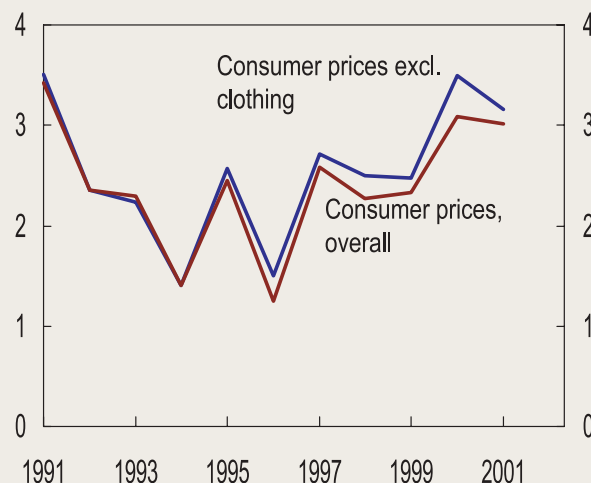
Chart 1 Consumer prices. Clothing and imported consumer goods. 12-month rise. Per cent



Source: Statistics Norway

Imported consumer goods account for just over 25 per cent of the overall consumer price index (CPI). In recent years clothing has had a weighting of from 5 to 7 per cent in the CPI. In 2000, lower clothing prices contributed to pushing down the rise in consumer prices by almost ½ percentage point (see Chart 2). The average

Chart 2 Consumer prices. Total and excl. clothing. 12-month rise. Per cent



Sources: Statistics Norway and Norges Bank

rise in consumer prices from 1995 to 2001 would have been about ¼ percentage point higher without the fall in clothing prices.

The fall in clothing prices over the past 6-7 years cannot be explained by means of traditional explanatory factors. Neither cyclical developments nor developments in the krone exchange rate should imply a fall in the price of clothing. Growth in the Norwegian economy has been strong during this period. Unemployment has been low, and the rise in labour costs high. In the US and Europe, too, economic developments in the late 1990s and in 2000 were characterised by a period of economic expansion. International producer prices rose in the period as a whole, and the krone exchange rate remained relatively stable on average up to the beginning of 2002.

¹⁾ Clothing prices as measured in the consumer price index.

There has been no similar fall in clothing prices in the EU or the US. Although the rise in clothing prices in these countries has also been relatively slow, it is far from the subdued level recorded in Norway.

The work on understanding and developing a reliable model of imported consumer goods has been discussed regularly in Norges Bank's inflation reports in recent years.²⁾ This article is an extension of previous analyses. Other work in the area includes that of Moe (2002), who argues on the basis of foreign trade statistics data that international trade liberalisation has been an important factor behind the fall in clothing prices.

The background to these price developments is a resolution from the Uruguay Round of GATT committing members to a substantial reduction of trade barriers to imports of textiles. This in turn led to lower tariff rates and greater possibilities for importing goods from low-cost countries. This article endeavours to calculate the isolated effects of trade liberalisation on consumer price inflation.

With an inflation target for monetary policy, a knowledge of aspects of consumer price inflation such as this is particularly important. The analysis in this article may thus make an important contribution to the estimates on which Norges Bank's inflation projections are based.

In Section 2 we present a summary of textile trade policy.³⁾ Section 3 deals with the effect of trade liberalisation on price inflation, and we present the results of a simple model of clothing prices. The welfare gains ensuing from trade liberalisation are discussed in conclusion.

2 Foreign trade policy

Developments in world trade

The World Trade Organisation (WTO) was established in 1995, succeeding the General Agreement on Tariffs and Trade (GATT), which was formed just after World War II. Throughout the 50 years of its existence, the main purpose of the institution has been to ensure that international trade flows as freely as possible. Since 1948, global merchandise exports have grown by an average of 6 per cent annually. Over 90 per cent of world trade today takes place among WTO countries.

The global trade regulations applying today have been developed over time through a series of rounds of negotiation. The first round was mainly concerned with the reduction of tariff rates. Subsequent rounds also included other areas, such as anti-dumping and subsidies. The last major round of negotiations, the Uruguay Round (1986-1994), led to the formation of the WTO.

Regulation of the textile industry

Up until the Uruguay Round, the textile industry was among the most strictly regulated manufacturing sectors. Textile trade was regulated by a separate agree-

ment, the Multi-Fibre Agreement (MFA). The MFA allowed importing countries to negotiate bilateral export restraint agreements with "low-cost countries".

The Uruguay Round led to major changes in textile trade policy. It was decided to eliminate quota regulations and reduce tariff rates during the period 1995-2005. However it was decided that it should be largely up to the individual country to decide on the time to be spent in reducing tariffs. Norway, for example, has been relatively quick in liberalising trade compared with the US and the EU.

Norwegian clothing trade policy up to the Uruguay Round

Norway signed the MFA in 1974. In the period 1974-1977 Norway signed a number of bilateral agreements under the MFA with countries in Asia, and similar agreements with Portugal and some eastern European countries. Norway withdrew from the agreement in 1978 as a result of the breakdown in negotiations between Norway and Hong Kong, and introduced its own system of global import quotas under the GATT safeguard clause (Article 19). This was an even stricter system than the regulations under the MFA. The import quotas covered virtually all countries except those in the European Economic Community (EEC) and the European Free Trade Association (EFTA). The import quotas were distributed by the Norwegian authorities to various importers, who were then free to choose the countries from which they would import. Norway rejoined the MFA in 1984, and negotiated some 20 bilateral agreements.

The quota restrictions came on top of a protective tariff of 17-25 per cent which applied to the majority of low-cost countries and some western countries, such as the US. Norway's membership of EFTA since 1960 meant that the EFTA countries were exempt from tariffs. The EFTA Free Trade Agreement with the EEC from 1973 led to a reduction of tariff rates in relation to EEC countries. From 1984 trade with the EEC was no longer subject to tariffs. In the 1990s, EFTA entered into a number of new free trade agreements, as a result of which a number of other countries, including some eastern European countries,⁴⁾ were exempted from tariffs.

Results of the Uruguay Round for Norwegian textile trade

Dismantling of the quota system

Norway was one of the first to start dismantling the quota system. The last clothing quotas were abolished in 1998. By contrast, both the EU and the US chose to adhere on the whole to the more long-term schedule defined in the Uruguay Round.

²⁾ See, for example, boxes in Inflation Report 1/99, 3/01 and 2/02.

³⁾ The significance of trade policy for developments in clothing imports has also been discussed by Melchior (1993)

⁴⁾ Turkey, Estonia, Lithuania, Romania, Hungary and Poland secured free trade agreements with EFTA in the early 1990s. Tariff rates were reduced relatively rapidly once the various agreements entered into force. This group of countries has not been subject to tariffs or quotas since 1998.

Reduction of tariff rates

In 1993, the Storting passed a resolution to gradually reduce the general tariff rates on clothing in the period 1994 to 2004. The weighted average ordinary tariff rate was to be lowered from about 20 per cent in 1994 to 12 per cent in 2004.

Table 1. Average tariff rate on clothing¹ from Norway's 25 most important trading partners. Per cent

	1993	1996	1999	2002
Eastern European countries that signed free trade agreements with EFTA in the early 1990s.	20	2	0	0
EEA/EFTA countries	0	0	0	0
GSP-countries	20	19	16	7
Others (US)	20	19	16	14
Overall	8	7	6	3

¹ Calculations are based on about 300 product categories with different tariff rates. The rates in the table have been arrived at by import-weighting products and countries.

Different trade agreements have led to tariff burdens varying substantially from country to country. Of our most important trading partners for clothing, only the US is subject in full to the ordinary tariff rates. Table 1 shows developments in tariff burden by trading partner, classified according to the type of agreement under which they are regulated.

The estimates in the table are based on 25 countries which together account for about 95 per cent of clothing imports. The countries are grouped into four categories: eastern European countries, EEA/EFTA countries, GSP⁵⁾ countries and other countries (only the US in this estimate)⁶⁾.

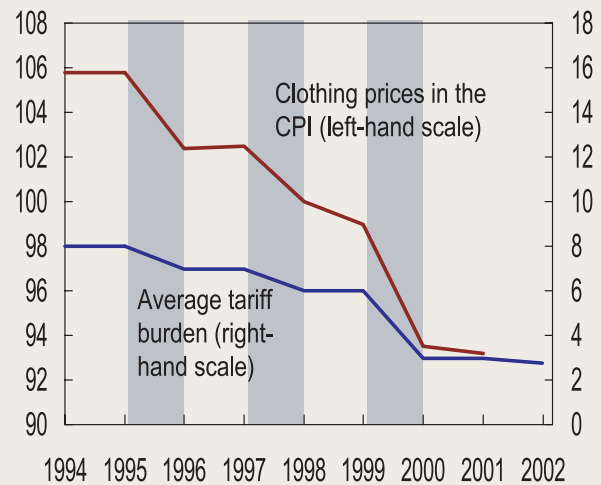
The majority of developing countries have traditionally been subject to full textile tariffs. The countries come under the GSP scheme, which offers tariff exemption for most manufactured goods from developing countries, but textiles and agricultural goods have been among the exceptions. An important change took place in 2000, however, when the Storting passed a resolution to remove tariffs from a number of textile products imported from GSP countries. This led to a substantial reduction in tariff burdens on these countries (see Table 1). The textiles that are still subject to tariffs are goods that compete with Norwegian products, particularly children's clothing, underwear, some men's clothing and leisurewear.

3 The effects of trade liberalisation on prices

Direct effect of lower tariffs on prices

Chart 3 shows the weighted average tariff rate for all countries and products, as calculated in Section 2, and compares this with clothing prices in the CPI. From the chart we see that clothing prices fall most in the years in which the reduction in the overall tariff burden is greatest. In 2000, the tariff burden was reduced by about 3 percentage points as a result of changes in the GSP scheme. The chart shows clearly that these changes immediately fed through to prices⁷⁾.

Chart 3 Average tariff burden (per cent) and clothing prices in the CPI (index).



Sources: Statistics Norway, Norges Bank, the Ministry of Finance and the Ministry of Foreign Affairs

The consumer price index adjusted for tax changes and excluding energy products, CPI-ATE, is affected to approximately the same extent as the CPI, because it is not adjusted for changes in tariff rates.

The shift in trade from high to low-cost countries has led to lower purchase prices for Norwegian clothing retailers.

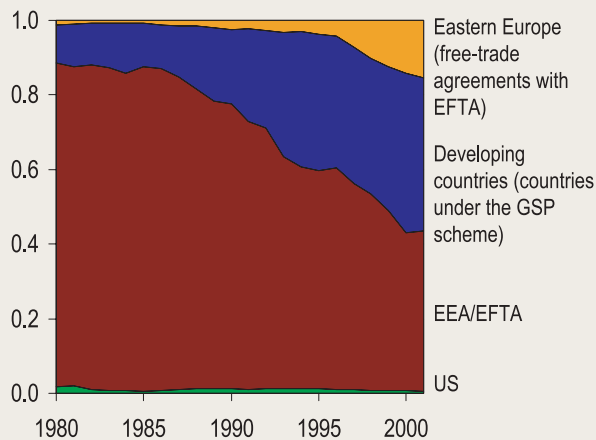
The removal of quotas and reduction in tariff rates have contributed to a shift in trade from western high-cost countries to low-cost countries such as China and countries in eastern Europe. Chart 4 shows developments in clothing imports from the four groups of countries described in Section 2, as a share of total clothing imports. From 1980 to 1986, almost all clothing imports came from the present EEA. Norway had a free trade agreement with the EEC through EFTA. At the same time, Norway limited imports from GSP and eastern European countries through import and export quotas.

5) GSP stands for "Generalised System of Preferences". The system was established in 1971 with the aim of improving market access for developing countries. The preferential tariff treatment varies from one industrial country to another.

6) The EU: Austria, Denmark, Finland, France, Germany, Greece, Italy, the Netherlands, Portugal, Spain, Sweden and the UK. Eastern European countries (countries with free trade agreements via EFTA): Estonia, Hungary, Lithuania, Poland, Romania and Turkey. GSP countries: China, Hong Kong, India, Indonesia, Korea and Thailand. Other: the US

7) The rise in the overall consumer price index from 1999 to 2000 was reduced by an estimated 1/4 percentage point as a result of this effect.

Chart 4 Import shares by country for Norway's 25 largest trading partners, clothing.



Sources: Statistics Norway and Norges Bank

After the resolution to gradually dismantle the system of import quotas in 1986, the share of imports from GSP countries rose rapidly at the expense of imports from EEA countries. The share of imports from eastern Europe rose sharply from the mid-1990s, after the free trade agreements with EFTA took effect.

This increase in imports from low-cost countries at the expense of imports from high-cost countries means that the purchase prices for Norwegian clothing retailers have fallen. We have attempted to calculate an index of producer prices for clothing (the purchase prices for Norwegian importers) which takes account of this gradual shift in trade to countries with lower price levels. In order to construct such an index, current trade weights and data on price level differences between countries are required.

Using estimated purchasing power parities from the World Bank as a basis, we have calculated a measure of the price level differences between the countries from which we import clothing⁸⁾. Table 2 illustrates the price level in a selection of these countries as a share of the Norwegian price level.

Chart 5 provides an illustration of the calculated producer price index compared with a traditional producer price index. Normally, a weighted average of the rise in producer prices for different trading partners is used as a measure of an overall producer price index. Trade weights are also updated annually in this index. The method captures differences in trading partners' price inflation, but fails to capture the effects on prices of a shift in trade to countries with different price levels.

Both indices are calculated using a weighted average of price developments among Norway's 25 most important trading partners in clothing trade⁹⁾, the same countries as in Table 1. The blue curve represents the traditional producer price index. The red curve is our calculated index, which in addition to price inflation in the

Table 2. Price levels in selected countries as a share of the Norwegian price level, 2001

Country	Price level
Denmark	1.04
Sweden	1.00
Norway	1.00
UK	0.92
Germany	0.89
Finland	0.89
US	0.88
France	0.86
Italy	0.76
Poland	0.41
Lithuania	0.37
Estonia	0.33
Romania	0.23
China	0.19
Indonesia	0.18
India	0.17

Sources: World Bank and Norges Bank

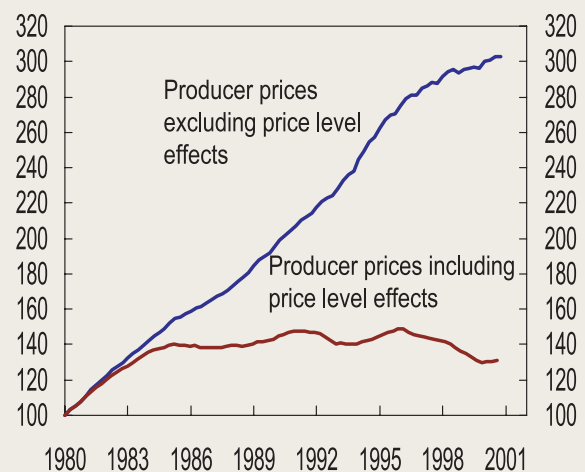
various countries also takes account of differences in price levels. The latter provides a better indication of the actual rise in prices faced by Norwegian clothing retailers, given the change in import pattern.

The substantial difference in the paths of the indices illustrates the impact the trade shift has had on price developments.

The results from a simple model of clothing prices

With the aid of an econometric model of clothing prices we have calculated the isolated effects of trade liberalisation. In the model, clothing prices in the CPI are

Chart 5 Foreign producer prices for clothing, 25 countries. Indices. 1980 Q1 = 100



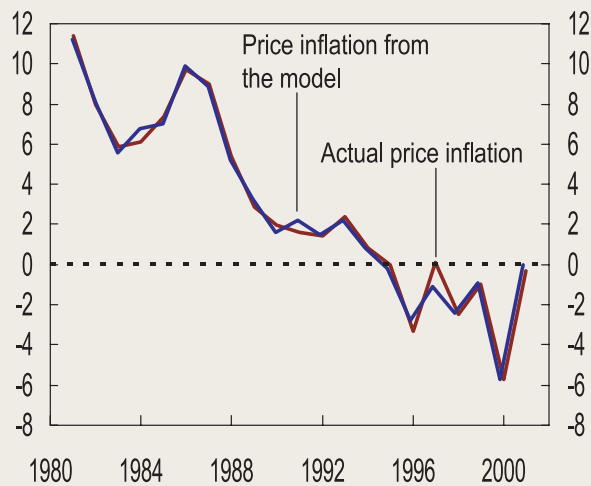
Sources: Statistics Norway, EcoWin and Norges Bank

⁸⁾ See Melchior (1993) for an example of how price levels can be calculated.

⁹⁾ The series in the chart are consumer prices. It has proved difficult to find reliable producer price indices for a number of countries, particularly developing countries and countries in eastern Europe.

explained in terms of exchange rate movements, developments in the import-weighted producer price index, which takes account of price level differences, and the average tariff rate. The estimates from the model are presented in an annex to this article. Chart 6 illustrates how the model has explained the rise in clothing prices since 1981.

Chart 6 The fit of the model. Rise in clothing prices in the CPI



Sources: Statistics Norway and Norges Bank

According to the model, reduced tariff rates are reflected immediately in lower clothing prices. In the short term, a one percentage point reduction in the tariff rate results in a one per cent lower rise in clothing prices. The average tariff rate was reduced by 5 percentage points in the period 1994-2001, and thus explains one third of the 15 per cent fall in clothing prices during the same period.

The import shift, which is the indirect effect of trade liberalisation, contributes to a gradual reduction in clothing prices over time. This is expressed in the model through a condition that the law of one price applies. This means that over time Norwegian clothing prices are expected to be on a par with international clothing prices adjusted for exchange rate changes and price level effects. However, this long-term relationship will not hold at all times, because of factors such as transport costs, the continued existence of trade barriers and domestic competition. Over time, competition in the market and the possibility of arbitrage will nevertheless push down clothing prices in Norway for a given increasing share of low price imports and a given exchange rate.

Exchange rate movements also influence prices in the

short term. Norges Bank's calculations indicate that an exchange rate change has its strongest effect on consumer price inflation after about one year, but that it takes several years before the effect is exhausted. The time lag may be due to the fact that importers hedge to some extent against exchange rate fluctuations. Another explanation is that contracts for purchase of a clothing collection are often signed well before the clothing is made available for sale in shops.

4 Concluding remarks

On average, overall consumer price inflation¹⁰⁾ has been pushed down by about 1/4 percentage point annually since 1995 as a result of the fall in clothing prices. As shown in this article, this is to a large extent an effect of trade liberalisation, both directly in the form of lower tariffs and indirectly as a result of the shift in imports to low cost countries.

The Storting has adopted a schedule for reducing tariff rates on clothing by 2004¹¹⁾. We are therefore expecting lower tariff rates in both 2003 and 2004. Moreover, the krone exchange rate has appreciated this year. If the exchange rate remains unchanged from the level in the third quarter of 2002, the import pattern continues changing in the way it has been observed to do for the past few years, and the Storting follows up its resolution on lower tariff rates, clothing prices may continue to fall for the next couple of years.

The developments in clothing prices that we have seen in the past few years, and which according to our model will continue for the next couple of years, result in considerable welfare gains. Figures from Statistics Norway's consumer expenditure survey indicate clothing consumption for almost NOK 30 billion in 2000. By comparison with a scenario in which clothing prices remained unchanged at the 1995 level, Norwegian consumers are estimated to have saved roughly NOK 4 billion annually¹²⁾. The amount is substantially larger than the reduction in tariff revenues, and illustrates the significant welfare gains inherent in removing self-imposed import restrictions.

¹⁰⁾ Both the CPI and the CPI-ATE.

¹¹⁾ In the Revised National Budget for 2002, the Government proposed a phasing out of tariff rates that went further than the Government was committed to. The proposal called for the removal of 630 tariff rates on manufactured goods, including goods such as perfume, cosmetics, plastic goods, leather goods, sewing thread, knitting wool, fibre cloth, twine, laces, lines and ropes, fishing nets and carpets. In all, tariff revenues were reduced by about NOK 100 million in the 2002 budget.

¹²⁾ See Melchior (1993) for a more detailed analysis of the welfare gains resulting from trade liberalisation.

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