

Evaluation of the impact of the reduction of VAT in the hairdressing sector

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Zoetermeer, 26 October 2008

This survey was commissioned by the Koninklijke Algemene Nederlandse Kappersorganisatie (ANKO/Dutch Hairdressers Association) with the financial support of the Hoofdbedrijfschap Ambachten (HBA/Trades Council for Crafts).

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Summary

Impact on employment of the VAT-reduction in the hairdressing sector

Since 1 January 2000 the low VAT rate has applied to turnover related to the hairdressing trade. The purpose of this low rate was to boost employment. Model calculations contained in this report show that employment development has a delayed reaction to turnover development. The increase in turnover as a consequence of the reduced VAT in the hairdressing sector resulted in a limited increase in employment during the first year (just over 1000 additional employees). However, a favourable impact on employment development in the hairdressing sector was especially evident in year 2 (2001: 2100 employees) and year 3 (2002: 2100 employees). The total impact is estimated at 5400 people. This means growth is more than 15%.

It must be noted here that these estimates are not very accurate, particularly in connection with the percentage of part-time workers which in all likelihood has changed. Nevertheless, it can be concluded from the analysis that the reduction in VAT has had a (significantly) positive impact on the number of employees in the hairdressing sector.

Proven VAT-price-turnover-employment mechanism

An explanatory model has been drawn up for the employment development in the hairdressing sector. The model comprises two comparisons. The first comparison explains the turnover development. In the second comparison the employment development is explained by the turnover development. Of the large number of potential explanatory variables the best explanatory model proved to be the growth in private consumption and the relative price movement. The VAT reduction implemented as per January 2000 was incorporated in the model as a dummy variable.

The calculations showed that turnover (exclusive of VAT) increased significantly as a result of the VAT reduction. Employment (number of employees) also increased significantly in a directly related and delayed response to the increased turnover, as stated previously.

The VAT reduction has also been a strong fiscal incentive for hairdressers with a relatively low turnover to no longer take part in the black economy. This may partly explain the sharp increase in the number of self-employed hairdressers.

The data used in the model

Several sources were used for this study. Information pertaining to the employees in this sector (1996-2006) was compiled through data obtained from Interpolis where pensions as well as dues for the sector fund are placed. Company data was taken from the Centraal Registratiekantoor Detailhandel-ambacht (CRK/Central Records Office for the Retail Trade & Crafts).

Total employment in the hairdressing sector increased each year from 1997 through 2007. During that time employment increased by a total of 22%. Employees make up the largest group in this employment. The number of employees increased through to the end of 2003 after which it dropped slightly. The number of hairdressers without staff (so-called ZZPs) has increased substantially as from 2002, whilst the number of hairdressers who do employ staff has remained stable.

Consumer spending on care products and hairdressing services is highly dependent on the economic climate. From 1996 through 2001, turnover increased by approximately 5% per year. From 2003 to 2006 turnover in the hairdressing sector increased only slightly. As from 2004 the economy in the Netherlands improved, which is reflected with some delay in the turnover of the hairdressing sector.

Turnover in the hairdressing sector is made up of a pricing component and a volume component. Consumer spending dropped during 1999-2003 when the economy was down. It is remarkable that the volume in the hairdressing sector increased by almost 6% in 2000, right in the middle of the economic dip. This was greatly influenced by the reduced VAT rate. The volume in the sector improved again as from 2006 after a few less prosperous years.

On average, prices in the hairdressing sector increased more rapidly than inflation (CPI/Consumer Price Index). The difference between CPI and price movements in the hairdressing sector is referred to as the relative price movement. A relatively sharp increase in prices as compared to inflation is common in sectors where labour is the main production factor. Figure 4 shows that the relative price movement came to an average 1.5% per year. In 1998, 2001 (introduction of the euro) and 2005, the relative price movement was clearly below average. In 1999 and 2003, the relative price movement was considerably higher, mainly as a result of a significant increase in the cost of labour. Only in the year 2000 and as a result of the reduction in VAT in that year, was the price movement in the hairdressing sector higher than inflation. Most of the VAT reduction (approximately 70%) was passed on to the consumer. The remainder was used to improve the profit margin in the hairdressing sector.

Background to the VAT reduction in 2001

Since 1 January 2000 the low VAT rate has applied to turnover related to the hairdressing trade. This rate was implemented within the framework of a three-year experiment carried out with the consent of the Council of the European Union for the purpose of increasing employment. The basis for this was the mechanism explained previously. Besides hairdressing services, four other (groups of) non-cross-border labour-intensive activities were involved in this experiment in the Netherlands.

The European Commission has extended, in stages, the VAT reduction trial for non-cross-border labour-intensive services to 2010 despite current discussions concerning its possible impact. There is a fair chance that the trial will be turned into a permanent measure after 2010¹.

¹ NRC Handelsblad, 31 July 2008: EU: Low VAT rate is permitted

1 Introduction

Since 1 January 2000 the low VAT rate has applied to turnover related to the hairdressing trade. This rate was implemented within the framework of a three-year experiment carried out with the consent of the Council of the European Union. As per that date the lower VAT rate of 6% for hairdressing services replaced the general rate of 17.5% (which since then has risen to 19%). Retail products sold by hairdressers – such as hair care products, cosmetics and such – have remained subject to the general VAT rate.

Four other (groups of) labour-intensive activities were involved in the experiment in addition to hairdressing services, namely:

- bicycle repair
- shoe repair and leather products repair
- clothing repair
- paintwork and plasterwork carried out on houses of 15 years and older

The government's main goal in reducing VAT was to increase, by means of the price mechanism, employment in the sectors and/or activities to which the reduction applied. With the VAT reduction, prices were expected to drop to a lower level than if no reduction was applied, and subsequently result in increased demand. Higher demand for hairdressing services would in turn result in increased employment.

The European Commission has extended, in stages, the VAT reduction trial for non-cross-border labour-intensive services to 2010 despite current discussions concerning its possible impact. There is a fair chance that the trial will become a permanent measure after 2010¹. European Commissioner Kovács (taxes) has submitted a proposal to turn the temporary VAT scheme into a permanent measure. The proposal will mean that certain member states will be at liberty to charge a lower VAT rate for certain sectors. For instance, at present some member states are permitted to reduce the VAT rate on restaurant food and catering services while other states may not².

Obviously, the topic of VAT rates has ANKO's unremitting attention. The hairdressing sector's participation in this trial was preceded by a lengthy and intensive lobby by ANKO. That lobby was also successful in having this trial prolonged. ANKO, as the foremost representative of the Dutch hairdressing sector, is convinced that, should hairdressing activities again fall under the general VAT rate, the sector will suffer disastrous consequences. ANKO therefore considers it its task to collect information (or have information collected) to place the impact (past and present) of the VAT reduction on the hairdressing sector in a wider perspective, thus enabling a differentiated decision to be made as to whether the reduced VAT should or should not be continued.

¹ NRC Handelsblad, 31 July 2008: EU: Low VAT rate is permitted

² Hoofdbedrijfschap Ambachten/Trades Council for Crafts (2008): Reduced VAT rate on labour-intensive services possibly after 2010, www.hba.nl, original source: tax department, 9 July 2008.

This study aims to fill this need for information. Contrary to previous exercises, EIM carried out a factual effect survey. This report provides an account of this survey, first describing existing studies and the approach taken for the current study, followed by background data. Chapter 4 contains the results of the effect calculations.

2 Previous studies

Various studies have been carried out to determine the impact of the VAT reduction. Important studies are those executed by EIM (Business & Policy Research), RvB (Research voor Beleid/Institute for Policy Research) and the CPB (Centraal Planbureau/Bureau for Economic Policy Analysis). This chapter contains an overview of their methods and their results. These are important for placing the present research in its proper context.

2.1 EIM Research by means of models

By order of the Ministry of Finance, EIM carried out an ex ante (advance) study into the probable impact of reducing VAT on a number of labour-intensive services¹. By order of ANKO, EIM later performed various similar studies, specifically aimed at the hairdressing sector².

The idea behind the model calculations is simple: a change in VAT results in a change in the price hairdressers charge their customers. Price changes subsequently lead to changed demand (turnover (exclusive of VAT)); the scale of this change is determined by the extent of the price elasticity of demand.

In turn, changes in demand result in changes in employment; the scale of this impact depends on the extent of elasticity of employment. Changes in the turnover (exclusive of VAT) and (possibly) in the profit margin of hairdressers influence, in their turn, the VAT contribution paid by the hairdressing sector; obviously, the revised VAT rate itself has an impact here as well. In order to perform the model calculations as described previously, a number of basic principles must be established.

This analysis shows that if the VAT increase (i.e., the reduction is discontinued) is fully passed on to the customer, employment would drop by 2,800 to 3,700 FTEs. That is a reduction of respectively almost 8 and almost 10%. If the VAT increase is only partially (50%) passed on to the customer, employment is expected to drop by 1,400 to 1,800 FTEs. This means a reduction of 4% and 5 %, which comes down to a drop of 4-5%.

In 2002, ANKO requested EIM to perform a number of case studies on the impact of the VAT reduction on individual hairdressing salons. The conclusion is that the number of moonlighters in the sector has decreased as a result of the introduction of the low VAT rate. It has also been concluded that the bulk of the VAT reduction has been passed on to the consumer. Part of the VAT reduction has been used to keep turnover and profit margins up. The case studies also showed that the labour market for hairdressers was relatively tight in

¹ *De werkgelegenheidseffecten van een btw-verlaging op arbeidsintensieve diensten/The impact on employment of a VAT reduction on labour-intensive services*, EIM, 1998.

² *BTW-verlaging in de kappersbranche; Effecten op prijzen, omzet en werkgelegenheid/VAT reduction in the hairdressing sector; Impact on prices, turnover and employment*, EIM, August 2002 and *Beëindiging btw-experiment; Gevolgen voor de werkgelegenheid in de kappersbranche/Termination of VAT trial; Implications for employment in the hairdressing sector*, EIM, June 2003.

the year 2000. The limited availability of suitable personnel¹ was partially responsible for the slow hiring.

2.2 RvB ex post evaluation

In 2002, the Institute for Policy Research (RvB) studied the impact on employment of the VAT reduction on labour-intensive services. Besides hairdressers, bicycle makers, shoe-makers, caretakers and those who work in home care fall under the category of labour-intensive services.

RvB concluded from the results that the VAT reduction had no statistically demonstrable impact on employment in the hairdressing sector². Having said that, RvB does not conclude that it has had no impact.

These research results induced a lot of criticism from trade unions, employers' organisations, Members of Parliament and MKB-Nederland (Royal Association for Small- and Medium-Sized Businesses). The RvB study was counterchecked by the Centraal PlanBureau (CPB/Netherlands Bureau for Economic Policy Analysis)³.

2.3 CPB Countercheck

The CPB has scrutinised the RvB and EIM studies with respect to content and method. The CPB concludes that there are indications that the reduction in VAT has had a positive impact on employment; this conclusion is based mainly on accepted economic theories. However, it is very complicated to factually measure the impact on employment (as did RvB) over the short term.

The CPB reasons that businesses in the hairdressing sector will first try to handle increased demand with current staff (labour hoarding), only hiring additional staff after they are sure they are dealing with structural additional demand. Furthermore, the consumer price will not benefit from the full VAT reduction. It is plausible that part of the lower VAT rate will be used to achieve higher profit margins for the businesses. These higher profit margins may attract new entrepreneurs and thus indirectly have a positive impact on employment.

¹ Kranenborg, A., P.J.M. Vroonhof (2002), *Het BTW-tarief in de kappersbranche/The VAT rate in the hairdressing sector*, EIM.

² Wolders, M (2002): *Monitor effecten BTW-verlaging arbeidsintensieve diensten/Monitored impact of the reduction of VAT on labour-intensive services*, RvB.

³ CPB (2003), *Contra-expertise effecten BTW-verlaging arbeidsintensieve diensten/Countercheck on the impact of VAT reduction on labour-intensive services*.

3 Data and model description

3.1 Sources

Various sources were consulted for the study. Data pertaining to the employees in this sector was obtained from Interpolis, where both the pensions and the contributions to the sector fund are placed. The archive relates to 1996 through 2006 and contains such data as:

- Individual companies
- The start date of participation in the pension scheme per employee per company
- The end date of participation in the pension scheme per employee per company

On the basis of this archive a reliable employment progression can be made of the number of employees for the years stated above¹.

All companies operating as a hairdressing salon must be registered with the Centraal Registratiekantoor Detailhandel-ambacht (CRK/Central Records Office for the Retail Trade & Crafts). The CRK thus has a reliable archive providing information on the number of hairdressing salons². Series of annual data are available from 1-1-1996 through to 1-1-2006. The number of companies with employees can be found in the afore-mentioned pension archive. The difference between the two archives in numbers of companies equals the number of companies with no employees. The number of self-employed hairdressers can be determined on the basis of the size of an average company. Furthermore, a distinction can be made between companies with employees and companies with no employees. The first group is also available via Interpolis. The second group, the ZZPs (companies with no employees), was acquired only via the archives of the Hoofdbedrijfschap Ambachten (HBA/Trades Council for Crafts).

The sources used are not primarily for purposes of setting out policy. The data files were first and foremost compiled for administration purposes. Therefore, the data has been processed for application in policy research.

3.2 Employment development

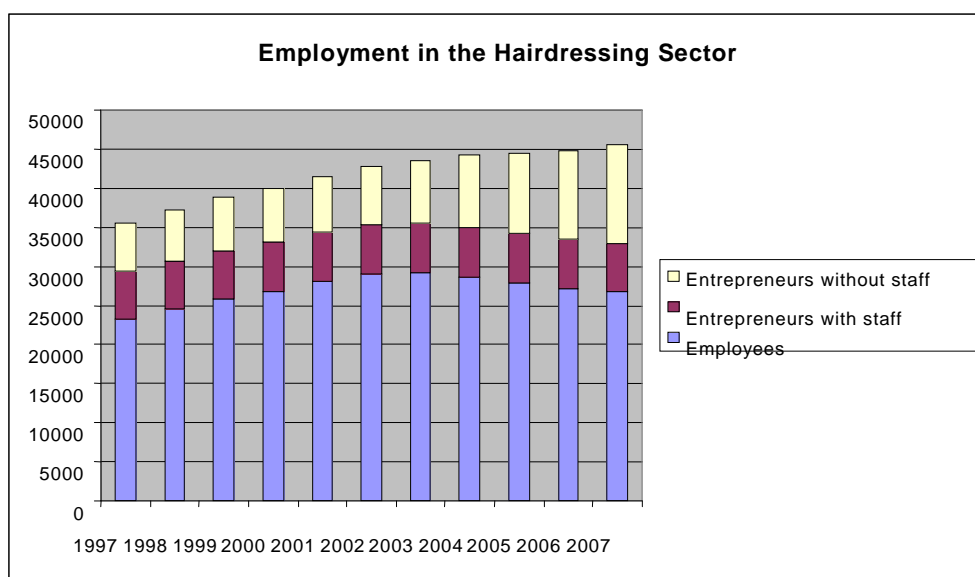
The total employment in the hairdressing sector is the sum of the number of people employed and the number of entrepreneurs (ZZPs and entrepreneurs with personnel). All the data pertains to individuals³. Figure 1 reflects employment in the hairdressing sector from 1997 to 2007.

¹ The CBS (Central Statistical Office) does not keep an account of the employment development in the hairdressing sector. Nor is the outcome of alternative sources, such as a determination of employment via the CRK archives, very reliable.

² EIM has found that the archive is reliable with respect to the level and the development of the number of companies in the hairdressing industry. The archive is also classified by size. This classification gives an indication of the employment division by size.

³ No numbers are available for companies with no staff for 1998, 2000, 2002, 2004 and 2005. These numbers have been estimated by taking the average of the two adjacent years.

Figure 1 Total employment in the hairdressing sector, 1997-2007



Source: EIM, Labour market monitor for the hairdressing sector, September 2008

Figure 1 shows that the total employment from 1997 through 2007 increased each year. Employment during this time rose by 22% in total.

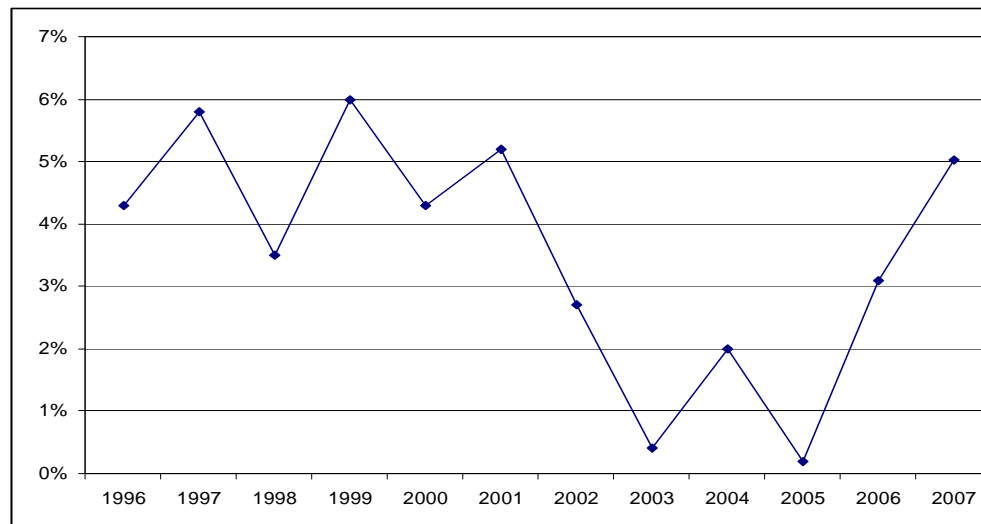
Employees make up the major part of the total employment. The number of employees increased through to the end of 2003, after which it dropped slightly. The number of entrepreneurs without staff (ZZPs) increased significantly as from 2002 whilst the number of entrepreneurs with staff remained stable. This shift can possibly be explained by the fact that more and more employees set up their own business as ZZPs. The changes in the *Vestigingswet* (Establishment of Businesses Act) as per 1 January 2004 had a beneficial effect on the growth of the number of self-employed people. The VAT reduction also induced a sharp rise particularly in the number of female (part-time) entrepreneurs in the hairdressing sector. Because of the VAT reduction much of the fiscal benefit of moonlighting has been lost; many former moonlighting hairdressers have therefore opted to carry out their activities on an official basis. Furthermore, the *Kleine Ondernemers Regeling* (KOR/Small Business Scheme)¹ has helped to convert moonlighters into official workers in the hairdressing sector. This applies especially to self-employed hairdressers with a turnover of up to approximately 30,000 euros. This is the turnover limit for which entrepreneurs who fall under the low VAT rate are eligible for the KOR. For entrepreneurs who fall under the high VAT rate, this turnover limit is approximately 10,000 euros.

¹ Within the framework of the *Kleine Ondernemers Regeling* (KOR/Small Business Scheme) entrepreneurs who contribute less than 1,883 euros VAT, can be eligible for a reduction of their VAT dues. Entrepreneurs who must pay less than 1,345 euros can even be made exempt from VAT dues. Entrepreneurs who fall under the high VAT rate already reach the amount of 1,883 euros at a turnover limit of approximately 10,000 euros. Entrepreneurs who fall under the low VAT rate reach the limit of 1,883 euros when their turnover amounts to approximately 30,000 euros.

3.3 Turnover development – volume and price

Consumer spending on care products and hairdressing services is highly dependent on the economy. Figure 2 shows that the turnover up to and including 2001 grew by approximately 5% per year. Between 2003 and 2005 the turnover in the hairdressing sector increased only marginally. The economy in the Netherlands started to improve in 2004 which is reflected with some delay in the turnover of the hairdressing sector.

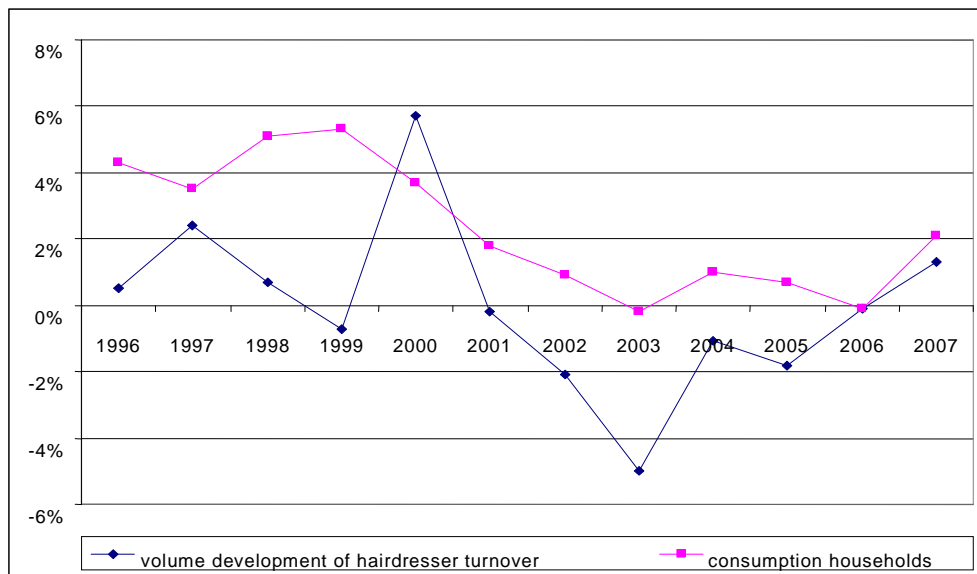
Figure 2 Turnover development in the hairdressing sector in percentages (inclusive of VAT), 1996-2007



Source: EIM based on CBS

The turnover in the hairdressing sector comprises two components: price and volume. Figure 3 reflects the development of the volume in the hairdressing sector, which, simply translated, is the number of customers who have their hair cut.

Figure 3 Volume development in the hairdressing sector, 1996-2007



Source: EIM based on CBS

Figure 3 clearly shows that consumer spending dropped between 1999 and 2003, which was a recession period. It is remarkable that the volume in the hairdressing sector in 2000, in the middle of the recession, increased by almost 6%. As the next chapter shows, this was largely due to the reduced VAT rate. The volume in the sector picked up again as from 2006 after a few lesser years.

Figure 4 Price movements in the hairdressing sector (inclusive of VAT), 1996-2007



Source: EIM based on CBS

Price movements in the hairdressing sector are shown in Figure 4. On average, prices in the hairdressing sector rose quicker than inflation (CPI). The difference between CPI and the price movements in the hairdressing sector is referred to as the relative price movement. A relatively sharp increase in prices as compared to inflation is usual in sectors where labour is the main production factor. Figure 4 shows that the relative price movement comes to an average of 1.5% per year. In 1998, 2001 (the year that the euro was introduced) and 2005, the relative price movement was well below average. In 1999 and 2003 the relative price movement was considerably higher, mainly as a result of a sharp increase in the cost of labour. Only in the year 2000 is the price movement in the hairdressing sector better than the inflation. This is as a result of the reduction of the VAT rate during that year¹.

¹ Based on the cost development in the hairdressing sector and the development of prices in 1999 and 2001, a price movement of approximately 6% could be expected. The difference between 6% and the actual 1.5% drop in prices is the portion of the VAT reduction that was passed on to the consumer. This part equals approximately 70%. The remainder of the VAT reduction (approximately 3.5%) was used to improve the profit margin in the hairdressing sector.

4 Impact of the VAT reduction

An explanatory model has been created for the employment development of employees in the hairdressing sector. The model comprises two comparisons. The first comparison explains the turnover development. In the second comparison the employment development is explained by the turnover development. So-called dummy variables were used in these comparisons.

The model incorporates the employment development of employees only. The development of the number of self-employed people is influenced by factors other than the development of the number of employees, such as improved image of entrepreneurs, general market conditions and changes in legislation. The VAT reduction was also a boost, particularly for sharply increasing the number of female (part-time) entrepreneurs in the hairdressing sector. Because of the VAT reduction much of the fiscal benefit of moonlighting has been lost; many former moonlighting hairdressers have therefore opted to carry out their activities in an official capacity¹.

In order to draw up the best possible model of the development of the number of employees in the hairdressing sector, many potential explanatory variables were scrutinised. In the end the development of private consumption and the relative price movement resulted in the best explanatory model. The relative price movement was determined as the difference between the general inflation (exclusive of VAT) and the price movement in the hairdressing sector (exclusive of VAT). The following two tables reflect both model equations.

Table 1 Comparison 1 with turnover development (%) as the variable to be explained

<i>explanatory variable</i>	<i>coefficient</i>	<i>t-value</i>
Private consumption (%)	0.80	3.6
Relative price movement (%)	-0.74	-2.1
VAT reduction	0.10	4.2
VAT reduction (delayed 1 year)	0.01	0.4
R ² =0.89		

The coefficients have the following significance. In 2000, the increase in turnover in terms of percentage was 10% higher than without the VAT reduction². In 2001 that percentage was still 1%.

¹ Also see chapter 3.

² So, for instance, 2.2 instead of 2 percent growth. The actual growth is relevant to a lesser extent because the other variables also play an important part. Especially relevant is that (very) significant effects can be seen.

According to the same reasoning, the increase in employment in 2000, 2001 and 2002 was 33%, 56% and 53% higher respectively than it would have been without the VAT reduction. This follows from the data contained in Table 2.

Table 2 Equation 2 with the development of the number of employees (%) as the variable to be explained

<i>explanatory variable</i>	<i>coefficient</i>	<i>t-value</i>
Turnover development (%)	0.33	1.6
Turnover development (delayed 1 year) (%)	0.56	2.8
Turnover development (delayed 2 years) (%)	0.53	2.7
R ² =0.86		

Note: A model was also tried in which a turnover was incorporated with a 3-year delay. It added no explanatory value, but will be used henceforth for calculating the impact on employment.

The VAT reduction of January 2000 has been incorporated in this model as a dummy variable. It turns out that the explanation of the employment development of employees in the hairdressing sector improves substantially when this dummy variable is included in the model. R² is used as a measure of significance, which is high with a value of 0.89 and 0.86. An R² can be no more than 1.0, which value explains 100% of the development. The t-value in the table shows the significance per explanatory variable. As from a value of approximately 1.5 it can be considered significant.

The model shows that the employment development has a delayed reaction to the turnover development. Thus, increased turnover in Year 1 will only lead to a limited increase in employment in the hairdressing sector. It has a favourable impact on the employment development in the hairdressing sector especially in Year 2, but in Year 3 as well. Literature refers to this delayed reaction as 'labour hoarding'. This means that companies mainly adjust their employment in response to permanent changes in the development of their turnover. So this is the main reason why the VAT reduction in the year 2000 did not result immediately in a substantially sharper increase in employment, but was only reflected in the employment development in the two following years.

The above models can be converted into an equation through which the impact on the number of employees (in number of people) in the sector can be estimated. The model calculation (contribution per explanatory variable to the growth in terms of a percentage of the number of employees) can subsequently be converted into the number of people. The contribution to the growth can be described per year per variable. So, the contribution of price movements is negative because the prices charged by hairdressers increase more on average than inflation. The contribution of private consumption is highly positive. The contribution of the VAT reduction has been positive. It follows from the model that the VAT reduction had an impact of just over 1000 additional employees in the year it came into effect. The impact was greater in the following two years – around

2100 people. The total structural impact is valued at 5400 people; growth of more than 15%.

It should be noted that the calculation of the VAT impact is indicative. Particularly the part-time percentage (average number of hours worked / number of full-time hours) can be liable to change, which influences the accuracy of the calculations. The change in demand due to the VAT reduction (stand-by employees are called up more often) and strongly increasing number of ZZPs (employees who start their own business) probably influenced this point. Nevertheless, it seems completely reasonable to assume that the VAT reduction had a major (positive) influence on the number of employees.