

By The Way: who was right?

Short-term effects of VAT-raise on
commercial theater in The Netherlands

Student

Yfke Koolhaas

#336213

yfkekoolhaas@gmail.com

Erasmus University Rotterdam

Erasmus School of History, Culture and Communication (ESHCC)

Date

June 5th 2013

Supervisor

Dr. B.J. Langenberg

2nd reader

Dr. F.R.R. Vermeylen



SUMMARY

The subject of this master thesis refers to the discussion in The Netherlands on the strong negative effects of increasing value added tax (VAT) in the performing arts sector. This thesis takes part in this discussion by answering the main research question:

What were the short-term effects of VAT-raise on commercial theater producers in The Netherlands?

Also the title contains a question: who was right? This question refers to the difference in point of view by the government and a research company *Ape*. The government intended to increase income from VAT on the performing arts sector by raising it from 6% to 19%, whereas *Ape* stated increasing income from VAT to the government would be impossible because demand for performing arts would decrease too much due to this VAT-raise.

This thesis is set up in three parts. First a theoretical framework is set forth containing theory on VAT on the market of commercial theater, consumer theory and the recent study by *Ape* on the effects.

Then the hypothetical outcomes are given, based upon the theoretical framework, and the methods and data that are used to test these hypotheses are described.

Finally, the results of this research are set forth per hypothesis, which then provide an answer to the main research question and a winner of ‘the battle’.

Theory

In chapter two the market of commercial theater in The Netherlands is described: it’s share on the whole market for performing arts as well as particular market characteristics, the forming of contracts, prices, price setting and the role VAT has played over the last decades. VAT is tax that is included in prices paid by buyers of a product. In the performing arts sector there are two kinds of buyers: theaters who buy performances at producers and consumers who buy tickets at the theaters. Changes in VAT resonate through both these submarkets and influence prices, demand and income. The ways in which VAT influences commercial theater

producers depends on the form of contract and the reaction of consumers to possible price changes.

Therefore in chapter three theory of demand is set forth. This contains theory of consumer behavior and is used to predict or explain reactions of consumers to price changes. For every product a demand schedule can be drawn. However, for cultural products the consumption depends on more than taste, income or prices of related goods. To explain which other factors influence consumer decisions regarding consuming theater a model for cultural participation is given. This chapter also explains the development of figures for price, income and cross-price elasticities of demand. Demand for commercial theater depends on more than just box-office prices. To investigate in which way and to what extent increased box-office prices influence demand, a couple of factors need to be analyzed: box-office prices, changes in demand, consumer income, prices of substitutes and the different demand elasticities.

In chapter four the effects that were forecasted by *Ape* (Goudriaan, 2010) are set forth. To so the method and data of this research are first outlined. The results of this research show that it was expected that box-office prices for commercial theater would increase with 12,3%. Given the relatively strong price elastic character of commercial theater, demand would then decrease with 13,5%. Income of producers would decrease equally, which would force a loss in employment and a decrease in spending in other sectors. These effects together would result in a disappointment for the government: the increase in income from VAT on performing arts would fall 20% short of the 45 million Euros that were hoped for.

Hypotheses

Based on this theoretical framework five hypotheses are given:

1. Box-office prices for commercial theater productions have increased after the VAT-raise.
2. Demand for commercial theater decreased due to the VAT-raise.
3. Commercial theater producers experienced negative effects on income of the VAT-raise.
4. Employment at commercial producers has decreased due to the VAT-raise
5. The intended raise in income to the Dutch government from VAT was not met during the first year.

Method and data

While this master thesis was developed, new secondary data was presented in November 2012. That rapport (Blankers et al., 2012) on the effects of the economic crisis on cultural sectors, forms a rich source for quantitative data which can be used to analyze the effects of

the VAT-raise. Then three commercial producers are confronted with these effects and asked for their experiences and opinion. These case-studies form the qualitative base for explaining the ways through which the quantitative data should be analyzed and for explaining the found effects.

Results

What is found is that box-office prices have not increased with the full percentage that was needed to capture the VAT-raise. The decrease in demand cannot be contributed to the VAT-raise, because demand for commercial theater had already been decreasing and the found figures for price elasticity of demand are not useful since they are not calculated using box-office prices but average income per visit to the producer. Income of producers has experienced negative effects of the VAT-raise, because box-office prices were not raised enough, so theater and producers had to partially capture the VAT-raise in their own income from box-office sales. Although employment depends on income at companies, a change in employment in the first season after the VAT-raise cannot be contributed to this raise, because developments in employment follow developments in income and a change in employment would therefore be revealed during the following season, for which no data is available yet and VAT has been decreased to 6% again. Last but not least, this thesis shows that the government did *not* overestimate the increase income from VAT on the performing arts sector by the raise from 6% to 19%.

Conclusions

Two short-term effects of the VAT-raise on commercial theater producers were determined: an increase in box-office prices and a decrease in income to the producer.

Box-office prices did increase with 7,32% after the VAT-raise. This was not enough to keep the VAT-raise from affecting income to the producer. Demand for commercial theater decreased, but this decline had already been set in years before and was not enlarged after VAT increased. Therefore this decrease in demand cannot be contributed to the VAT-raise.

Due to the combination of decreasing demand, an increase in box-office prices that was not enough to cover the VAT-raise and to the fact that per visit more VAT had to be paid during season 2011/12 than before, income to producers has been affected negatively by the VAT-raise.

A decrease in employment has not been noticed yet. Employment follows trends in a company's or sector's income, therefore the effects on employment could be revealed in

season 2012/13. However, VAT has been lowered to 6% again and the effects on employment will have been diminished.

Demand for commercial theater has not decreased as much as was expected and although it is unknown by how much income from VAT on performing arts to the government has increased exactly due to the VAT-raise, the calculations in this master thesis lead to the conclusion that the 45 million 'goal' was met and the government has won the battle.

PREFACE

Writing this master thesis taught me more than ‘just’ the effects of increasing VAT on commercial theater producers. At work at a commercial theater producing company, I have followed and experienced the effects of the VAT-raise up closely. The emotional effects are sometimes even stronger than financial effects, therefore it was very interesting to analyze the data that show changes and trends in the theater sector. I also got confronted many times with the ‘political game’ that increasing VAT was apparently a part of, which explains the emotional reactions. I would like to thank the three producers that made time to explain their experiences.

On an academic level this ‘last assignment’ finally taught me to really dig deep, stick to a subject and get to know all about it. Obviously I would never have gotten to this master thesis if I had not invested in all the essays and exams before, but never before have I invested so much, waited this long, until I got the result I wanted. Many people around me have had to be very patient. I thank my colleagues, my boss, my friends, my father and my two ‘little’ brothers for that. Most of all I want to thank my mother for her never ending faith in me and support since the first day I went to school and she realized (quote) ‘we were at the beginning of a very long road’.

While writing this thesis, I realized how much fun combining academic research and practical experience can be. I am sure I had never realized this, had my supervisor not been Berend Jan Langenberg. I am very grateful for his time, knowledge (both practical and academic), enthusiasm, coffee, support, jokes and interest.

Yfke Koolhaas

Amsterdam, June 2013

TABLE OF CONTENTS

Figures and tables	9
Concepts	10
1. Introduction	12
2. VAT and Theater	
2.1. Introduction	14
2.2. The market	15
2.2.1. Market characteristics	15
2.2.2. Estimated market size of the VVTP	16
2.2.3. Contracts	18
2.2.4. Prices and price setting	19
2.3. Value added tax and theater in The Netherlands	22
2.4. Conclusion	26
3. Theory of demand	
3.1. Introduction	27
3.2. Demand schedule	28
3.3. A model for cultural participation	29
3.4. Consumer tastes	30
3.5. Consumer income	32
3.6. Prices of related goods	34
3.7. Elasticities of demand	36
3.7.1. Price elasticity of demand	36
3.7.2. Income elasticity of demand	37
3.7.3. Cross-price elasticity of demand	37
3.6. Conclusion	38

4. Forecasted effects of VAT-raise	
4.1. Introduction	39
4.2. Method and data	39
4.2.1. Remark	40
4.2.2. Model	40
4.3. Results	41
4.4. Conclusion	43
5. Hypotheses	44
6. Method	
6.1. Introduction	49
6.2. Case-study design	49
6.3. New information	50
6.4. Data	51
6.5. Data collection per hypothesis	51
7. Results	54
8. Conclusions	67
Further research	70
Bibliography	71
APPENDICES	
Appendix A: demand elasticities	
Appendix B: interview schedule	
Appendix C: interview producer A	
Appendix D: interview producer B	
Appendix E: interview producer C	
Appendix F: summary in Dutch	

FIGURES AND TABLES

Number	Title	Chapter	Page
Figure 1	The Dutch cultural sector	2.1.	14
Figure 2	Production chain of theater	2.2.1	15
Figure 3	Income from box-office sales	2.2.4.	20
Figure 4	From box-office price to average income per visit	2.2.4	21
Figure 5	Changes in VAT on performing arts (timeline)	2.3.	24
Figure 6	Demand for theater tickets	3.2	28
Table 1	Model for cultural participation	3.3	29
Figure 7	Indifference Curves	3.4.	31
Figure 8	Indifference Curves with budget lines	3.5	33
Figure 9	Changing budget	3.6	35

CONCEPTS

An alphabetical list of most used concepts and the way they are defined in this research.

Groups of organizations

VVTP

Short for ‘Vereniging Vrije Theaterproducenten’: the association for commercial theater producers in The Netherlands

VSCD

Short for ‘Vereniging van Schouwburg- en Concertgebouwdirecties’: the association for managers of theaters and concert buildings in The Netherlands.

VVEM

Short for ‘Vereniging van Evenementenmakers’: the association for organizations of events, mainly music events and festivals.

Commercial producers

Non-subsidized theater producers. Not all commercial producers are VVTP-members, but all VVTP-members are commercial theater producers.

Theaters

All theaters in The Netherlands. Not all theaters are connected to the VSCD, but in the theater sector VSCD-theaters make up for the main part of the market by far.

Market terms

Purchase market

The market where producers are suppliers, theaters are buyers and theater productions are the products.

Consumption market

The market where theaters are suppliers, visitors are consumers and theater performances are the products. In this thesis, visitors are referred to as consumers.

Box-office prices

The prices consumers pay at theaters' box-offices.

Average income per visit

The average income producers or theaters receive per visit after VAT over box-office income has been paid and the negotiated division has been done.

Suppliers

Can be both theaters and producers. Theaters supply to the consumers on the consumption market, producers to the theaters on the purchase market

Fte's

Fulltime-equivalent: a unit that indicates the workload.

VAT

Value added tax.

1. INTRODUCTION

It is spring 2013 at this date of writing. Two years ago the Dutch government decided to increase value added tax (VAT) on the performing arts. The reason to do so was to increase income to the government from tax. This measurement caused a lot of commotion, not only within the performing arts sector itself, also on a national level. From national media the main question read out is: why should the performing arts sector receive the benefit of a lower VAT-rate, especially at times of economic crisis?

The question that afflicted the performing arts sector was: is it conscientious to increase VAT on performing arts, while keeping it at a lower level for products of other arts sectors, for example movies? This question sent a group of performing arts organizations to court, where they asked that the VAT-raise in their sector should be forbidden. Their request was denied and at the 1st of July 2011 VAT on performing arts was increased from 6% to 19%.

As soon as the intention to increase VAT was declared, the Dutch Association of Commercial Theater Producers (in Dutch: Vereniging Vrije Theaterproducenten; in short: VVTP) had asked research company *Ape* to investigate the effects this measurement would have on commercial theater producers. In November 2010, more than half a year before the VAT-raise was and at a moment where it was still not sure whether it really would be implemented, *Ape*'s researcher René Goudriaan published a rapport which forecasted four effects. The VAT-raise would cause a raise in average income per visit to the producer, a decrease in demand for commercial theater, a decrease in income of commercial theater producers and therefore a decrease in spending in other sectors by the producers themselves. Besides, Goudriaan concluded, the intended increase in income to the government from VAT on performing arts, would not be met.

A couple of months later it was clear that VAT on performing arts would be increased and by July 2012 it was. Surprisingly, one year later the measurement was reversed. By July 1st 2012 VAT on performing arts was lowered from 19% to 6%. The VAT-raise had therefore only been applied for theater season 2011/2012.

Within this research it will be set forth which of the forecasted effects were experienced by commercial theater producers and an answer to the main research question will be given:

What were the short-term effects of VAT-raise on commercial theater producers in The Netherlands?

As seen in the title of this thesis, there is one other question: *Who was right?* This question is based on the statement, apart from the four effects on commercial producers, that the intended financial goal of increased income from VAT on the performing arts sector, would not be met. So, who was right? The government, that thought income from VAT from the performing arts sector could be augmented by raising the VAT-rate? Or was *Ape* right, stating that demand for commercial theater would keep decreasing and so would income from VAT to the government?

Before answers to these questions can be given, more information on (1) the role of VAT in the Dutch performing arts sector, (2) the ways in which consumers make their decisions and (3) the effects that were forecasted by *Ape* is needed.

The following section (chapter 2) will outline the Dutch performing arts sector and the role of VAT in this. Then consumer behavior will be set forth in chapter 3 using the theory of demand, including the effect of (box-office) prices, income and prices of other goods on demand for theater: demand elasticities. Once this broader view is provided, the research of Goudriaan and its outcomes can be described (chapter 4) and put into context. Then, from this theoretical framework, a couple of hypothetical outcomes to the main research question, can be formulated (chapter 5). Chapter 6 will show how these hypotheses were tested, using which method and data, and chapter 7 will show the results of this research. Finally, in the concluding chapter, both the answer to which effects commercial theater producers have experienced from the VAT-raise and to who was right, will be given.

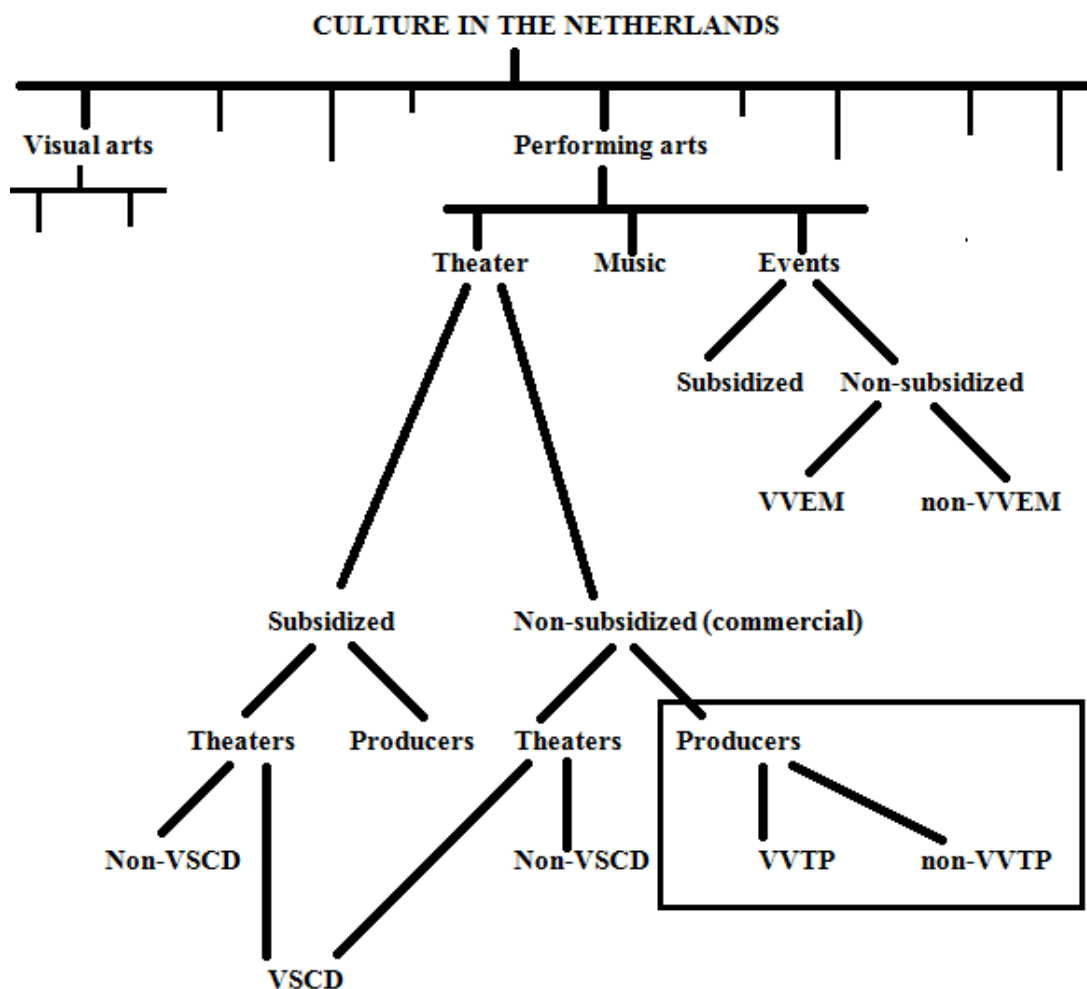
2. VAT AND THEATER

2.1. Introduction

This research concentrates on the effects on commercial producers of a VAT-raise on performing arts in The Netherlands. As figure 1 illustrates, commercial theater producers are on the non-subsidized part of the Dutch theater market.

In this chapter the economic circumstances of commercial theater producers in The Netherlands will be outlined: the market, the different contract forms, the way box-office prices are determined and the role of VAT for performing arts. This broader view provides a framework for the possible influence of changes in VAT for theater on commercial producers.

Figure 1: The Dutch cultural sector



2.2. The market

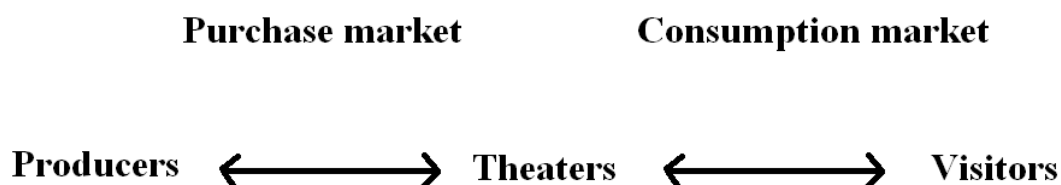
2.2.1. Market characteristics

The performing arts form one of many cultural sectors in The Netherlands (see figure 1). Not only theater, also for example music performances and events are performing arts. Genres classified as ‘theater’ are for example: dance, theater plays, stand-up comedy, musical, opera and mime. The most explicit characteristic of the market for performing arts is differentiation. Products, theaters, producers and consumer profiles are varied. Everything varies in size and in costs and/or income (Goudriaan et al., 2008: 71). A classical music concert in a large concert building with 100 musicians as well as a solo performance of a 20 year old actor in a tent, are products of this market.

The overall theater market consists of two submarkets: the purchase market (in Dutch: *inkoopmarkt*) and the consumption market (in Dutch: *afzetmarkt*) (Goudriaan et al., 2008: 70). On the purchase market the suppliers are theater producers and buyers are the theater halls, on the consumption market the theater halls are suppliers and the visitors are consumers. In The Netherlands almost all theater productions tour: they move mostly daily from theater to theater all across the country. Therefore all theaters are buyers of all producers and every production will be staged more or less nearby the homes of consumers.

The production chain on the theater market is built up as follows (in the most simplistic description):

Figure 2: Production chain of theater



Producers can be roughly divided into two categories: subsidized and non-subsidized (see figure 1). However, subsidized is never completely (100%) subsidized and non-subsidized, also referred to as commercial, theater is almost always partly and/or indirectly subsidized. One example of indirect subsidies to commercial producers are subsidized

theaters purchasing commercial theater. Most theater halls in The Netherlands receive financial support from a local government and through that are able to pay higher prices in the form of guarantee sums (see 2.2.3.: contracts) to the producers than they would be without subsidy. Other examples are: a drama writer receiving a grant to write a play which is then produced by a commercial producer or a group of artists that receives financial support in the form of subsidy, which then produces a show at a commercial producer. These methods of financial support keep production costs to the producers at a lower level.

On both the purchase and the consumption market for theater the strength of suppliers positions when it comes to price setting, vary according to the popularity of specific productions. On the consumption market, the supplier (theater) will have to carefully set box-office prices (see further: paragraph on prices and price setting).

On the purchase market, for every specific production there is only one producer. Theater halls can influence the price setting by producers, although their influence is limited. When a supplier raises the price of a production, a theater can decide not to purchase and choose a substitute that approaches the first choice as much as possible (Langeveld, 2009: 106). When too many theaters decide not to purchase production A, but turn to other suppliers for substitutes, the producer of A will be forced to lower its price (the requested guarantee sum). The position of producers is strongest when selling a unique and very popular production or solo artist. In that case, visitors will not be satisfied with a substitute and so will theaters not be, since they are the suppliers on the consumption market.

2.2.2. Estimated market size of the VVTP

Nineteen¹ commercial producers have subscribed to the Association for Commercial Producers, the VVTP, in Dutch: Vereniging Vrije Theaterproducenten. According to their mission statement, the VVTP is an interest group and concentrates on cooperation amongst its members in order to stimulate efficiency and the creation of remarkable productions (VVTP, 2013). Not all commercial theater producers are a member of the VVTP, but all VVTP-members are commercial theater producers (see figure 1).

¹ The website www.vvtp.com opens with stating that there are fourteen members. However, the list of members, on the same website, counts twenty one members. On the 'VVTP-fair', a day where all members come together and present their plans for the next theater season (this year: February 28th 2013), nineteen members were presented. Therefore it can be assumed that the front page, but also the list are outdated and that the VVTP currently represents nineteen members.

Determining the exact share of the VVTP on the Dutch performing arts market market is almost impossible since by far not all members provide data on for example number of performances and attendance figures. In 2012 data was gathered at VVTP-members (Blankers et al., 2012: 82). Eight² VVTP-members provided data on attendance, which shows they produced 6.025 performances during season 10/11 (Blankers et al., 2012: 82, 181). To illustrate the share of VVTP-members on the theater market, these figures can be compared to the figures for the same characteristics of the Association of Managers of Theater and Concert Buildings (in Dutch: Vereniging Schouwburg- en Concertgebouw Directeuren; in short: VSCD), the largest organization of theaters in The Netherlands (see figure 1). In 2010 the VSCD housed 54.800 performances (Kleingeld, 2011: 6), in 2011 35.173 (Kleingeld, 2012: 7). Not all performing arts performances take place in VSCD-theaters. The VSCD estimates its own market size at 55% out of total performing arts productions in The Netherlands (Kleingeld, 2011: 5).

Since a theater season in The Netherlands runs from September the one year until June the next, it can be expected that 1/4 of the number of performances in 2010 and 1/6 of this number in 2011 took place in season 10/11. Therefore it can be expected that approximately $(0,4*54.800+0,6*35.173=)$ 43.024 performances took place at VSCD-theaters during season 10/11.

Not all, but nearly all³ VVTP-performances take place in VSCD-buildings. The 6.025 performances of the eight VVTP-members make up for 14,0 % of the performances at the VSCD-theaters during season 10/11.

VVTP-members differ a lot in company size and therefore also in the number of performances produced per season. Which members have supplied data is only known to the research company and the average number of performances of these eight members is 753⁴. Based on this figure it can be expected that all 19 members together produced approximately 14.307 performances during season 10/11. This makes up for 33,3 % of the total offer at VSCD-theaters for season 10/11.

When the VSCD makes up for 55% out of total supply performing arts productions, the total supply is approximately 78.225 performances during season 10/11 (including all

² Nine VVTP-members provided data. However, data on attendance were useful from only eight members, on attendance from only seven.

³ There are no data that explain this statement, it is based on my own work experience at a commercial producer

⁴ The commercial producer I work at produces almost 700 performances per year. The average number of performances per producer calculated in this research therefore seems reasonable to take as an average number for all VVTP-members.

performing arts genres; see figure 1). Then the market size of the VVTP on the Dutch performing arts market can be estimated at 18,3%.

2.2.3. Contracts

Five general forms of contracts on the purchase market, between theaters and producers, are distinguished:

1. Buy-out (in Dutch: *uitkoop*):

The theater pays the producer a negotiated fixed price and all box-office income goes to the theater. In this way the financial risk lies with the theater: when box-office income remains under the amount paid to the producer, the theater will experience a financial loss. When box-office income exceeds the same amount, this profit goes to the theater (Langeveld, 2009: 112).

2. Split (in Dutch: *partage*):

At this form of contract, both income and risk are shared between theater and producer by negotiated percentages. In some cases the sharing of box-office income starts at zero, but in other cases a negotiated sum is paid by the theater to the producer. Other than buy-out contracts the box-office income that exceeds this amount is shared between the theater and the producer (Langeveld, 2009: 112). For example for one production the theater pays 3000 Euros to the producer and they agree to a split of 80/20. Then the producer receives 80% of box-office income with a minimum of 3000 Euros. If not enough tickets are sold to let the 80% income to the producer be 3000 Euros, the theater will pay the difference, so experience a financial loss for this production.

Therefore this form of contract knows two sub forms: 'split' (in Dutch 'partage') and 'split with guarantee sum' (in Dutch 'partage plus garantie').

3. Completion (in Dutch: *suppletie*)

With this relatively new found but increasingly used⁵ form of contract, the theater and the producer agree to a maximum sum until which the division of box-office income runs. For example when the theater and the producer agree to a completion with guarantee sum of 3000 Euros, split of 80/20 and a maximum of 6000 Euros, the producer will receive at least 3000 Euros but at most 6000 Euros. After enough tickets have been sold to let the 80% to the producer be 3000 Euros, the meter starts running and it stops when 80% is 7000 Euros. After this all box-office income goes to the theater.

⁵ Based on own work experience at a commercial producer

4. Rental (in Dutch: *huur*):

The producer rents out the accommodation and therefore the financial risk lies completely with him. This contract form is the opposite of the buy-out form (Langeveld, 2009: 112).

5. Costing (in Dutch: *costing*):

This contract form usually only appears in the music industry. The first layer of box-office income is to cover the costs of for example a band, the second to cover the costs of the accommodation and the rest is shared via a split (Langeveld, 2009: 112).

The market power on the purchasing market hovers between the producer and the theater. The form of contract that will be chosen depends on and differs per genre, spirit of the age, willingness to purchase by the theater (Langeveld, 2009: 112), overall popularity of a specific production on both purchase and consumption market, financial mix of producer and theater, history of contracts between them and so on.

2.2.4. *Prices and price setting*

When describing contracts above, box-office income was simply referred to as total income from box-office sales. However, this is not entirely true since VAT is deducted before income from ticket sales 'reaches' the theater and the producer. To illustrate and define the different incomes from ticket sales to the theater and the producer, the ways in which the box-office prices are constructed need to be clearly set forth.

The end product of the production chain of theater (see figure 2) is the theater ticket. This ticket has its price, in this research referred to as *box-office price*, paid for by the consumer on the consumption market (see figure 4). This box-office price is inclusive VAT, since it is the price at the very end of the chain. This price times the number of attendances results in the *total box-office income*. The financial sum that remains after VAT is deducted from total box-office income, is in this research referred to as *box-office income at the theater*. Dividing this amount by the number of attendances yields the *average income per visit at the theater*. However, this is not the same as the *revenue to the theater*. This depends on the negotiated share in income from ticket sales, the possible supplement⁶ and/or administration costs.

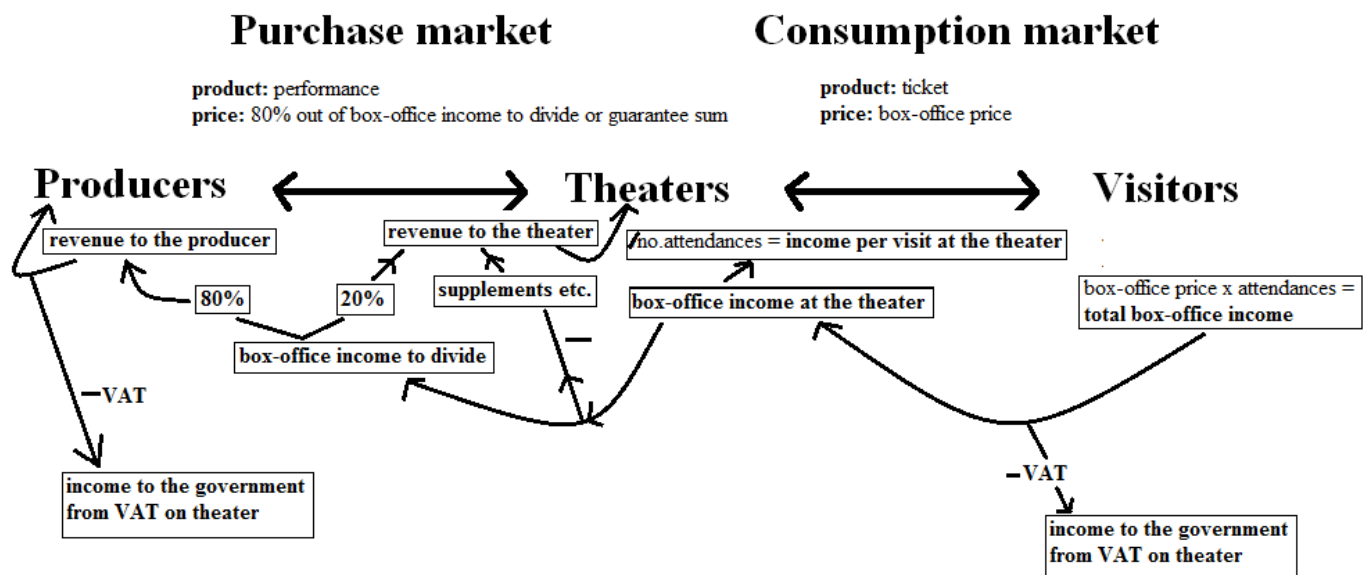
⁶ Theaters often add a couple of Euros to the negotiated box-office price to cover costs as a 'free' drink during the break and the cloakroom.

After deducting this revenue to the theater, what remains is the *revenue to the producer*. Dividing this by the number of attendances is one way to approach the *average income per visit to the producer*. The other way to approach the average income per visit to the producer is by dividing the guarantee sum by the number of attendances, when revenue to the producer has not exceeded the negotiated guarantee sum.

On both the purchase and consumption market VAT is paid over revenue from box-office income or over the guarantee sum. However, a producer and theater buy or hire equipment, room, scene decoration and so on for producing or housing a production and also pay VAT over those amounts. A company, in this case a producer, can balance out (in Dutch: salderen) what is paid over purchased or hired products with VAT that is paid over income (from box-office sales).

All this is summarized in figure 3, based on the model situation where theater and commercial (!) producer have agreed to a split contract with guarantee sum.

Figure 3: Income from box-office sales

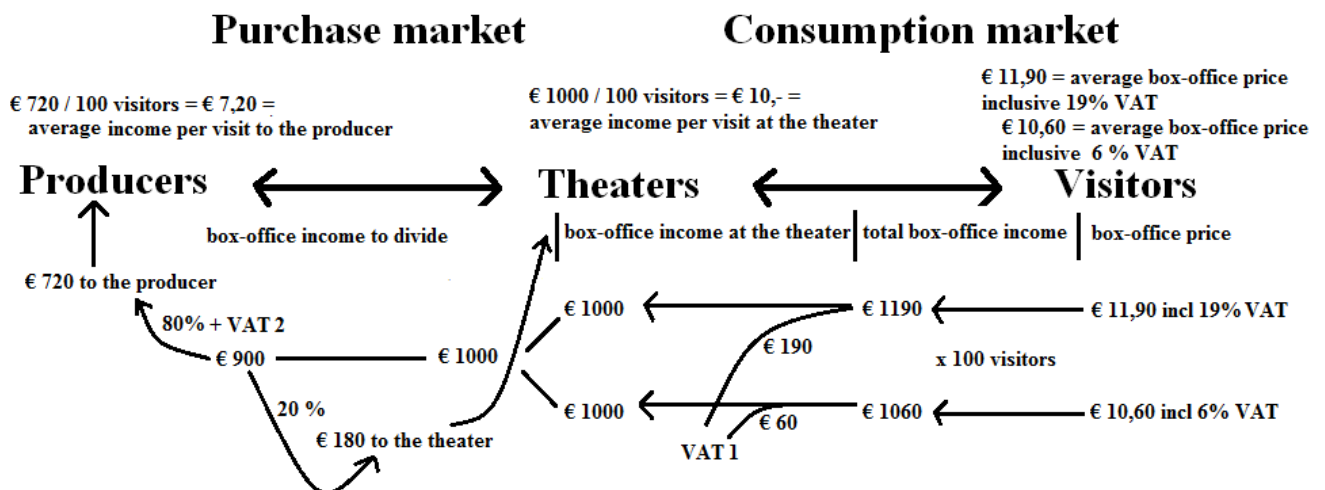


The price the theater (the buyer) on the purchase market needs to pay is 80% out of the box-office income that is left to divide after supplements etc. have been deducted *or* the guarantee sum. When 80% out of box-office income to divide is less than the negotiated guarantee sum, the theater pays the guarantee sum and revenue to the theater might be negative. At the

transaction on the purchase market, VAT is also added to the paid price (e.g. the 80% revenue or the guarantee sum). Therefore in figure 4 the amount divided by the number of visitors is regarded as 80% of revenue to divide.

The price that is paid on the consumption market is the box-office price. As will be seen in chapter 4, these definitions of income and prices on the theater market need to be regarded closely since analyzing their trends might provide a distorted view. For example, the average income per visit to the producer differs from box-office price (see figure 4). If in this example the guarantee sum would have been € 1500 (because a lot more than 100 visitors were expected), the theater has to pay € 1500 to the producer and experiences a loss in income. In that case the average income per visit to the producer is € 15, which is even more than the average box-office price.

Figure 4: from box-office price to average income per visit to the producer



The price setting of box-office prices, is based on experience and depending on the chosen contract form during the negotiations between theaters and producers (Goudriaan et al., 2008: 70). Those prices are usually set six to eighteen months before a production is staged. In a system where prices are set that long in advance, well-considered decisions need to be made since anticipating to circumstances shortly before or at the time when the ‘product is sold’ is not possible. Price and income elasticity of demand need to be kept in mind, as well as the presence and prices of substitutes, the popularity of the theater, the producer and the production, the developments on the market, the day of the week the performance will be staged and so on (Langeveld, 2009: 155,156). Theaters and producers negotiate on this and

agree to a certain box-office price and possible price differentiation and price discrimination. The strength of each of their positions is revealed in the form of the contract.

2.3. Value added tax and theater in The Netherlands

The Dutch Ministry of Finance implemented a lower VAT-rate of 6% for cultural products and necessities of life around 1998 (the commencing date differs per product or service). This also applied to the theater sector (see figure 5). Before that year the normal/higher rate of 19% was applied to these products. The overall objective behind this measurement of lowering VAT on these products, was to create (financial) space to attain secondary effects: stimulating demand and supply, stimulate culture, expansion of knowledge and support of the concerning sectors. The specific objectives per sector or cultural product had been formulated in different policies over the years (Plasterk & De Jager, 2009: 2).

Although VAT is tax added at the end of the production chain of theater, the lower VAT-rate did not have to be included into the box-office prices, meaning box-office prices did not decrease due to the new VAT-rate. For the theater sector and some other sectors stimulating demand was not the primary objective for decreasing VAT (Plasterk & De Jager, 2009: 2). The reason for applying the lower VAT-rate to products and services of the performing arts sector was to reduce production costs and to stimulate producers. As can be seen in figure 3, a decreasing VAT when keeping box-office prices at the same level results in higher box-office income at the theater and therefore in more income to both theaters and the producers. On the other hand, this measurement did prevent increases in box-office prices (Goudriaan, 2008: 69), which at least prevented a decrease in demand as a result of that.

The intention for lowering VAT in the performing arts sector was to compensate for the regulation of working hours⁷ (Goudriaan et al., 2008: 69). Another objected effect of the lower VAT-rate in the performing arts sector was to compensate for the costs due to graying of personnel, a trend that had been signaled (Plasterk & De Jager, 2009: 2).

At first the lower VAT-rate was only applicable to theater tickets. This caused so much administrative hassle and discussion to make the government decided in 2002 that the lowered VAT-rate should not only be applicable to theater tickets, but also to theater services, performances (TK, 2001-2002: 28015, C.6), which are the products on the purchase market.

⁷ implemented in 1996 and increased labor costs for performing arts producers. This law on working hours regulated the overall norms for minimum duration of rest period and maximum of working hours (De Vries et al., 1996). According to this regulation the working days of especially theater technicians contained too many hours in a row, also due to the travel distances between home and theater. This forced producers to plan double shifts, which increased their labor and therefore production costs.

To evaluate the effects of this measurement, in 2008 both the total loss as well as the loss per sector of income from tax that the Dutch government missed out on due to the lower VAT-rate (6%) regulation was calculated. Apart from that a simulative outcome was given for the situation where the VAT-rate would have been held constant at 19% and caused a decrease in demand. This decrease in demand would also have caused a loss in income from tax to the government (Goudriaan et al., 2008).

Total loss in tax income from culture in the 6% situation was 490 million Euros, in the 19% situation it was 415 million Euros per year (Plasterk & De Jager, 2009: 2).

Total loss in tax income from theater (halls) was 23,1 million Euros in the 6% situation and 21,7 million Euros in the simulated 19% situation (Goudriaan et al., 2008: 73).

The VAT-decrease was not calculated into the box-office prices (prices were not lowered due to the lower rate, on the contrary: they had been increased) and this gave financial room to the performing arts sector to attract new employees, after having to cut back on these due to the regulation on working hours (Goudriaan et al., 2008: 79).

A remark in this evaluation was that the profit of the lower VAT-rate did not always end up at the producers of performing arts since exploiters of halls had not always shared this benefit with them (Goudriaan et al., 2008: 79). The rapport states that touring companies mostly agree to buy-out contracts. Due to the fact that these buy out sums did not increase as well, the situation of producers remained unchanged after the VAT-decrease. This is mostly true for orchestras and choirs⁸ (Goudriaan et al., 2008: 77).

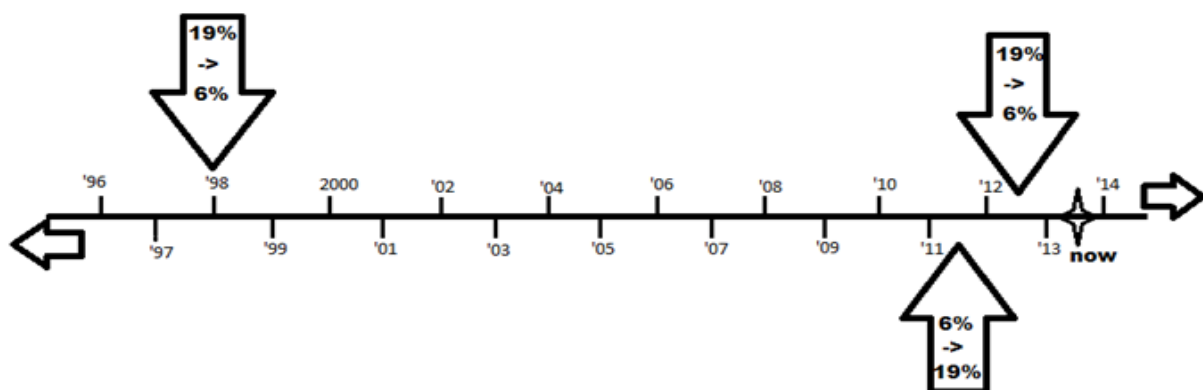
Also a couple of local governments shrunk subsidies after the VAT-rate was lowered. These remarks, together with a positive evaluation of economic effects, resulted in concluding that the intended effect was partially successfully achieved: the measurement improved the relationship between labor costs and income at the performing arts producers (Goudriaan et al., 2008: 80).

The Minister of Finance and the Minister of Education, Culture & Science (OCW) in 2009, concluded that both the evaluation in 2008 of the efficiency of the lower rate and a study of Copenhagen Economics on a uniform VAT-rate internationally, did not provoke changing the regulation of the lower VAT-rate in 2009 (Plasterk & De Jager, 2009: 5). The VAT-rate on theater tickets remained 6%, because it compensated in one way or another the (increased) costs of production.

⁸ Note that this remark refers to the total performing arts sector. In the theater sub sector the split contract form was used most. With this contract changes in VAT are shared between theater and producer.

However, one year later the Dutch government decided in the taxation plan for 2011 that the lower VAT-rate should no longer be applied to performing arts and visual arts. These sectors were put ‘back’ into the rate of 19% VAT by July 1st 2011 (TK, 2010-2011: Belastingplan 2011). This measure caused a lot of debates within the government. Some parties asked what the reasons behind this decisions were, especially at a time when large subsidy cuts were on hand as well. They asked whether the motive for applying the lower rate in 1998, to compensate the regulation of working hours and the graying of personnel, is no longer applicable. The answer of the State Secretary of Finance to these questions was that the measurement was meant to ‘cure the governmental financing’. Due to the national graying, the national and European economic crisis, the reorganization of the Dutch governmental financing system was needed. He stated the intention of the government was to stay away from intervening too much into the performing arts sector, which also implied restraint regarding the lowered VAT-rate, and referred to the evaluation of *Ape* (Goudriaan et al., 2008) which had concluded that the benefits of a lower VAT-rate did not always end up with the producers, which had been the target group for this measurement in the first place. He stated that fiscal measurements should always be reconsidered when they did not lead to intended effects (TK, 2010-2011: 32 504, nr. D).

Figure 5: Changes in VAT on performing arts



The Ministry of Finance hoped to increase income from tax by € 90 million Euros, of which € 48 million Euros should come from the performing arts sector. This figure is based on the yearly box-office sales of the years before 2011 and on the assumption that the same number of tickets will be sold in 2011 and the years after that. Effects as decrease in demand, substitution away from the performing arts sector and producing in other countries but

performing in The Netherlands, were not taken into account. The effect of decreasing demand was taken into account when describing the development of governmental income from tax, but the decrease in demand for performing arts with an inherent decrease in income from tax of this sector, was supposed to be compensated by spending of consumers in other sectors. It was assumed that when consumers would decide not to consuming in the performing arts sector, they would substitute away to other sectors, where then the tax would be paid. The Ministry of Finance assumed that decrease in demand for theater (on at least the short-term) would be limited based on the results in the evaluation of *Ape* in 2008 where a figure of price elasticity of demand (see chapter 4) was found of -0.32 and referred to similar figures found internationally for the performing arts sector (TK, 2010-2011: 32 504, nr. D).

The VVTP-members went to court, together with a few other groups of performing arts organizations. One important player in this was the Association for Event Organizing Organizations (in Dutch: Vereniging van Evenementenmakers; in short: VVEM). This organization realizes a lot of events as concerts and festivals, also of foreign artists, more in the music than in the theater sector. Like the VVTP, they also expected great negative effects of the VAT-raise. Together these organizations went to court to accuse the Ministry of Finance based on the principle of fiscal neutrality (competitive goods should be treated the same by the tax authorities) that the measurement of increased VAT would harm. They asked that the VAT-raise on performing arts should be forbidden. This possible incompatibility with the principle of fiscal neutrality had also been one of the questions of some parties of the Dutch parliament (see previous paragraph). Entrance to the Zoo, circus, movies and sports events remained 6% . The interest groups (VVTP, VVEM and so on) argued that these goods and services, especially movies, are competitive with performing arts. The court denied this request, because entrance to the performing arts could be distinguished from entrance to the other listed forms of recreation. Therefore the principle of fiscal neutrality remained intact (Rechtbank 's-Gravenhage, 2011).

The VVTP-members also turned to the market research company *Ape* in 2010 (the same company that evaluated the lowered VAT-rate in 2008), in order to evaluate the possible effects of the VAT-raise. The outline and results of this will be set forth in chapter four and forms the basis of this master thesis since it forecasted the effects the VAT-raise would have on commercial theater producers (Goudriaan, 2010).

2.4. Conclusion

The way of functioning of the theater market, the contract forms and the price setting behavior all more or less influence the effects of changes in VAT. A main characteristic of the performing arts sector is ‘differentiation’. This affects the decisions made by suppliers and buyers on the two sub markets: the purchase and the consumption market. The chosen form of contract and the negotiated box-office prices differ per supplier, product(ion) and consumer (or group of consumers). Therefore also the effects of changes in VAT depend on the decisions and agreements made by suppliers and buyers.

The role of VAT in price setting negotiations and the forms of contract between VVTP-members and theaters will be included in the interviews for the case studies, which are described in chapter six (Method) and be used to test the hypotheses formulated in chapter five. The results of this will be shown in chapter seven.

First the factors influencing consumer choices will be outlined. Changes in consumer behavior are expected according to changes in box-office prices after the VAT-raise. To calculate or simulate changes in demand for theater tickets, the figure for price elasticity of demand for theater is calculated (see chapter 3.7.). However, as will be shown in the next chapter: more than just prices alone influence consumer decisions.

3. THEORY OF DEMAND

3.1. Introduction

In this chapter the ways in which consumer reactions to price changes, in this case changes in box-office prices, are analyzed is set forth. Effects of (box-office) prices on demand for cultural activities is analyzed best by the micro economic theory of consumer behavior.

This model considers consumers to be well informed when choosing a goods and act rationally and consistent. Consumers choose a good or combination of goods that provides most utility to them given their income, prices of goods and their preferences. This process of optimalization leads to a couple of relations, expressed in demand curves, in which demand for goods and services depend on available income and prices of the goods (Blankers et al., 2012: 130).

The model of consumer behavior is helpful when trying to predict the reaction of consumers to changes in market conditions and explains price and income elasticities (Begg et al., 2008:75). Also for suppliers it is useful to analyze the consumption pattern of consumers through theory of demand, as due to the 'nobody knows' effect, producers cannot know in advance if and how much their good will be consumed and enjoyed (Towse, 2010:154). As seen in the previous chapter, estimating demand for a production is part of the contract negotiations between theaters and producers. Consumers cannot influence setting of box-office prices directly, but they can decide to buy a cheaper ticket or go to a similar but less expensive performance (Goudriaan et al., 2008: 70,71).

Demand for a good depends on its own price, prices of related goods, consumer incomes and consumer tastes (Begg et al., 2008: 42). The influence of a goods own price on demand is set forth in a demand schedule. The first part of this chapter (3.2.) will be analyzing this construction. The other three factors are analyzed through theory of consumer behavior, which can be explained by a model for cultural participation as set forth in 3.3. The parts following the description of this model, will analyze the three factors that are included in models of consumer behavior. First consumer tastes (3.4.) and how they can be modeled by indifference curves, then consumer income (3.5.) and how it can be modeled by a budget line in a figure with indifference curves and finally the prices of related goods (3.6.) and their influence on a consumer's budget line.

3.2. Demand schedule

The behavior of consumers is described by demand: the quantity demanded of a good at each set price. To model the demand for a good, a demand curve is set up, which shows the relation between price and quantity demanded (Begg et al., 2008: 38, 39).

For example the demand curve in figure 3 of demand for theater tickets, shows that an increase in box-office price will cause a decrease in quantity of tickets demanded, keeping all other factors constant. At € 30 the number of tickets demanded is 300. An increase in price with € 5, from € 30 to € 35, leads to a decrease in tickets demanded by 50, so from 300 to 250 tickets. Because every increase of the price that is equal to the previous, leads to a ditto increase in quantity demanded, this demand schedule is a straight line.

The slope of the demand curve differs per good or service and depends on or expresses its figure for price elasticity of demand (see chapter 3.7.).

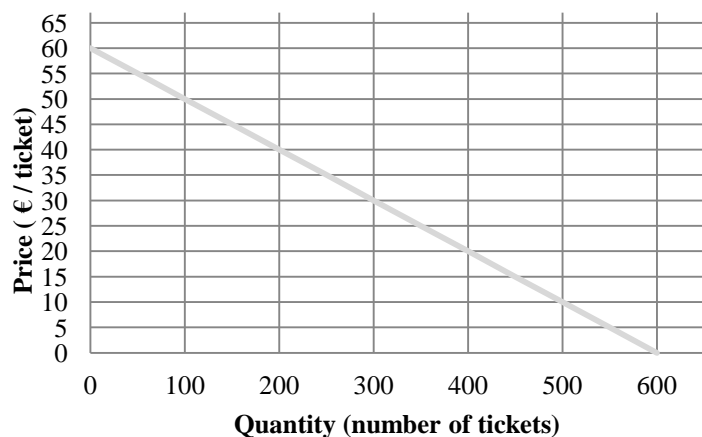
As stated above, in this model other factors apart from price are supposed to have stayed constant.

The theory of consumer behavior

describes the three of these other factors, that also influence consumer behavior, apart from a goods own price. These factors are categorized under three headings: (1) the price of related goods, (2) the income of consumers and (3) consumer tastes or preferences. Changes in any of these three groups will change the demand for a good (Begg et al., 2008: 40) and will cause shifts of its demand curve.

A demand curve is used to analyze the market for a certain good and therefore the goods own price is set along the vertical axe. The other three factors are determined elsewhere in the economy: the prices of other goods depend on their own markets, incomes depend on national economic circumstances of consumers and tastes depend on the development of people at a certain time. They are therefore not on the axes, but do have their influence on demand. Changes in price cause movements along the demand curve, changes in other factors cause shifts in the position of the demand curve (Begg et al., 2008: 42,43).

Figure 6: Demand for theater tickets



3.3. A model for cultural participation

When questions are posed about the relationship between theater and its audience, statements on the selection process of consumers, on why and with which frequency they select certain goods or services, are needed. In doing so it is assumed that from visiting theater people gain benefits. It provides utility, because it satisfies two needs: the urge for esthetical pleasure and the need for social regard (Ganzeboom, 1990: 29).

But selecting theater also brings about costs. Two restraints are posed, their availability differ per individual: the spare time and the money that need to be spend (Ganzeboom, 1990: 29).

From this four determinants in participation for theater can be distinguished: information process, social regard, time allocation and expense (Ganzeboom, 1990: 29).

For each of these four factors the determining constraint of potential visitors can be put against the characteristics of theater, which leads to a model for cultural participation (Ganzeboom, 1990: 49).

Table 1: Model for cultural participation

	Consumer constraint	Theater characteristic
I	Cultural capacity	Complexity
II	Social network	Conventionality
III	Monetary budget	Financial cost
IV	Time budget	Time cost

The relation of this constraints to the characteristics of theater leads to an analysis of consumers selection process under four headings. (1) The ability of an individual to process and enjoy information offered by theater performances in relation to the complexity of information offered, (2) the social regard an individual will gain from visiting theater, in relation to the social thresholds theater holds for him, (3) the costs of visiting theater in relation to a consumers budget and (4) the time it takes to visit a performance in relation to consumer's available time (Ganzeboom, 1990: 49).

The capacity for processing cultural information, differs per individual and depends on his background, social network and individual characteristics. When this individual capacity is compared to the complexity of a certain performance, the individual's ability to enjoy the performance is analyzed. His capacity holds two features: his expectations and skills. An individual's expectations depend on his personal learning process (Ganzeboom, 1990: 31). A

complete description of the analysis of peoples personal learning processes requires other scientific fields as for example psychology and sociology. However, a consumer's personal tastes or preferences are revealed in his individual demand schedule.

3.4. Consumer tastes

Consumer's taste or preferences depend on convenience, custom and social attitudes (Begg et al., 2008: 42) and are revealed in a demand curve. A growing taste in favor of a good will shift the demand curve to the right, because people will be willing to pay more, e.g. the quantity demanded will be higher at each price.

The price that consumers are willing to pay for a product depends on its value. For cultural products it is more difficult to determine the value and therefore the price, because it not only depends on the utility provided by the product or its material worth, but also on the cultural, personal and/or intrinsic value that consumers attribute to it. The theory of consumer behavior contributes preference orderings to consumers, which means they are supposed to prefer one good over another or to be indifferent between the two (Throsby, 2001:19,22). Consumers' tastes and preferences are based on what they 'naturally' like and on their background of experiences. The appreciation of a good grows with the time that is devoted to that kind of good. The reasons for consumers to consume cultural goods lie with both present satisfaction and the accumulation of knowledge and experience. A person's taste is build up over time and is therefore cumulative (Throsby, 2001:24).

For studies that have investigated on an aggregate level as well as for studies that have investigated demand for individual organizations, the three socioeconomic factors age, education and occupation play a central role (Seaman, 2005: 8-9) and therefore are the building bricks for taste formation.

Indifference curves

Although an individual prefers one good over another or one bundle of goods over another bundle, there are bundles that provide the same utility. An individual's taste can be expressed in a model with indifference curves and a consumer is indifferent between bundles that lie on the same indifference curve. The model of indifference curves is based on three assumptions.

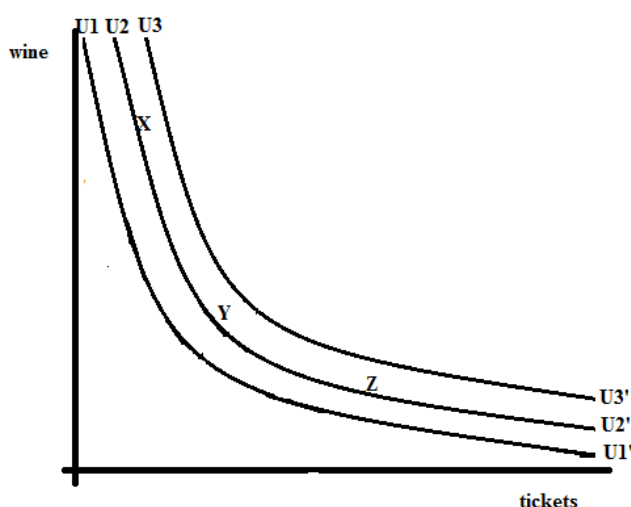
First of all taste is expressed through ranking bundles of goods: one bundle of goods provides more utility to a consumer than another bundle. Quantifying this utility is unnecessary since it depends on consumers personal tastes and preferences (Begg et al., 2008:77). For example a consumer prefers bundle A with seven theater tickets and three

movie tickets over bundle B with three theater tickets and seven movie tickets, because he prefers theater over movie. Then bundle A provides more utility to the consumer than bundle B.

The second assumption is that consumers prefer more to less (Begg et al., 2008:77). Consumers prefer the bundle that provides them most goods fitting their budget. In our example the consumer will prefer a bundle with ten tickets in total over a bundle with six tickets in total.

And the third assumption is that of a diminishing marginal rate of substitution, meaning that the more of good A the consumer is able to purchase, the more he would be willing to give up of A to purchase some of good B in order to keep utility constant (Begg et al., 2008:78). For example a consumer goes to a theater festival where shows last 30 minutes and he has a budget to spend on tickets to shows and glasses of wine. Suppose he spends his whole budget on wine, he will buy 30 glasses. Suppose he spends everything on the performances, he will buy 9 tickets. The utility of the bundles where everything is spend on either wine or shows, is both very low: drinking 30 glasses of wine, he will probably not survive the night, and he cannot see 9 performances on one evening. Therefore within for example a bundle where he has 25 glasses of wine, he will be willing to give up more wine to gain a ticket to a show than within a bundle where he has 15 glasses of wine (although he would still be very drunk) and he will be reluctant to give up a ticket in order to gain more wine.

Figure 7: Indifference curves



These three assumptions can be combined and expressed in consumers indifference curves (see figure 7). Each indifference curve ‘connects’ the bundles of goods with the same level of utility (Begg et al., 2008: 79).

The curves slope downwards and do not intersect because consumers prefer more to less (Begg et al., 2008: 79,80). More wine would increase utility, so a ticket has to be taken away in order to keep

utility constant and the bundles on the same indifference curve.

The curves flatten because of the diminishing marginal rate of substitution (Begg et al., 2008: 79): the consumer will be equally happy with bundle X as with bundle Y and with bundle Z, but moving from X to Y he is willing to sacrifice 5 glasses to gain one ticket and moving from Y to Z he only willing to sacrifice 3 glasses to gain one ticket. So the nearer the bundle is at the extreme points on the curve, the more the consumer will be willing to give up of the good of which he has the most and the nearer it is to the middle, the fewer.

Due to the assumption that consumers can rank bundles of goods, every point on U_3 will be preferred to every point on U_2 . D will be preferred to B, B to E and so on (Begg et al., 2008:79). An endless number of indifference curves can be drawn, where each one that lies higher is preferred over all the lower ones. But a consumer's budget puts a limit to what is affordable. Which bundle of goods is the best and still affordable to a consumer depends on his budget line, as shown in the following paragraph.

3.5. Consumer income

The third relationship described in the model for cultural participation is the one between monetary budget and the costs of consuming theater. This relationship depends on a consumers available budget, which depends on his savings, social class and most or all of his income (Ganzeboom, 1990: 49).

For most goods demand increases when consumer incomes rise (Begg et al., 2008: 41). Therefore increases in consumer incomes will cause a shift to the right of the demand curve, because people will be able to spend more and the quantity demanded at each price will increase.

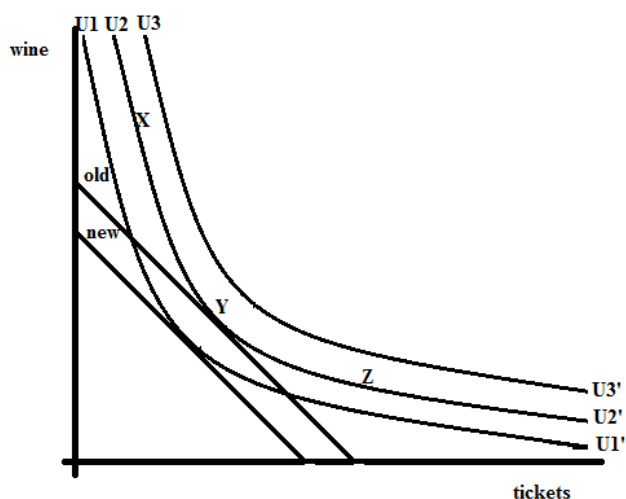
The combinations of goods that are affordable to the consumer, are called the budget constraint and can be expressed by the budget line. To the figure with indifference curves (figure 6) budget lines can be added to model the budgets of consumers (figure 7). The budget depends on consumer's income and the prices of related goods. At each point on the budget line we can read out the maximum quantity of a good that can be purchased, given the quantity of the other good that is purchased. No bundle of goods at a point above this budget line is affordable and bundles of goods that lie at points inside the budget line, leave income unspent (Begg et al, 2010:76,77).

To determine where the budget line lies in the model, the two most extreme points have to be calculated, where it the maximum of one good is bought given no quantity of the other good is bought at all. In the example: at which point is the whole budget spent on wine and at which point on theater tickets. The budget line is a straight line that connects these two

points and its slope can be determined by calculating the ratio of the prices of the two investigated goods: $-P_h/P_v$, the change in vertical distance, divided by the change in horizontal distance (Begg et al., 2008: 77, 81-82). In the example the slope of the budget line can be determined by calculating how many glasses of wine the consumer will have to give up to get one theater ticket.

When looking at the influence of consumers income on the quantity demanded of goods in economics, the possibility of saving is left out. In that way a rise in income will result in an increase in total consumer spending. By how much spending on a certain good will increase, depends on it's budget share of total consumer spending. Budget shares of goods might change over time too. For example the budget share of food will decrease and the budget share of cultural goods will increase when incomes rise (Begg et al., 2008:65).

Figure 8: Indifference curves with budget lines



When the indifference curves are combined with a budget line and the assumption that a consumer will choose the affordable bundle that maximizes his utility, we can read out on the figure which bundle of goods will be chosen. Because a consumer cannot afford any bundle of goods that lies on a curve above his budget line, he will not be able to

choose that bundle. And because it is assumed that he will maximize his utility, the consumer will not choose a bundle below his budget line (Begg et al.,2008:81). From the three bundles X, Y and Z in figure 6, the consumer will choose Y, because it is still affordable and maximizes his utility. No bundle on U3U3' can be chosen, because this indifference curve lies completely above the budget line.

When consumer income changes the budget line will shift. When income increases the budget line will shift to right, parallel to the former position, because consumers will be able to spend more. When prices remain constant, demand for a good will increase when income increases. On the other hand, when income decreases the budget line will shift to the left, parallel to the former position, because consumers will be able to afford less.

To illustrate this a new budget line has been added (see figure 8). Like for the budget line that expresses the 'old income', the endpoints of the 'new income' budget line can also be

determined by calculating the both most extreme points. The new budget line is parallel to the old line, because the prices of the two goods have stayed the same, only consumer income has decreased (Begg et al., 2008:83). Since theater tickets (and glasses of wine) are luxury goods, not necessities, demand is particularly sensitive to changes in consumer income.

More income means more to spend (in Dutch: bestedingsruimte), which means more money to spend on cultural activities. If box-office prices increase, but less than available income, the effects of these price increases will be limited. Econometric analyses that estimate price elasticity always keep in mind these relationships between different variables of demand for cultural activities (Blankers et al., 2012: 131).

3.6. Prices of related goods

Other goods can be complements or substitutes (Begg et al., 2008: 41). In the first case they are consumed *together with* the good in question, in the second case they are consumed *instead off* the good in question (Towse, 2010:142).

When good A is a complement for good B, consumers consume good A *together with* good B. For example: a glass of wine is a complementary good of a theater ticket. When the prices of theater tickets rise, the quantity demanded for theater tickets will fall and so will the quantity demanded for glasses of wine since fewer people will go to the theater. However, the decrease in demand for wine will only be noticeable at the theaters, probably not nationally, when prices for tickets are raised. Complementary goods are usually described when it concerns more specific features: a CD is a complement for a CD player, car tires for cars, and so on (Begg et al., 2008: 41).

When good A is a substitute for good B, consumers *choose between* good A and B. An increase in the price of good A will cause an increase in demand for good B, because demand for good A will decrease and consumers will choose B instead of A (Begg et al., 2008:84). Movie tickets are substitutes for theater tickets. When the prices of theater tickets rise, but the prices of movie tickets stay the same, the quantity of theater tickets demanded will decrease and the quantity of movie tickets demanded will increase. People will *substitute away* from theater to movie tickets.

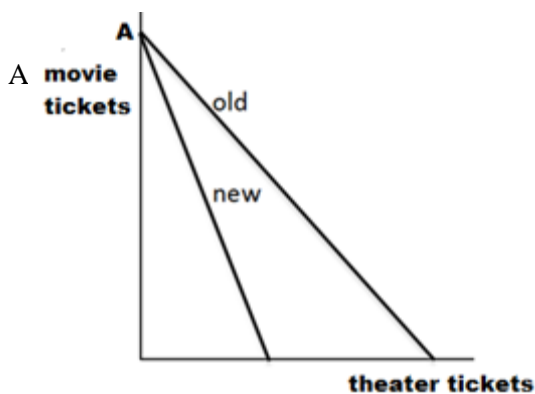
A rise in the price of good A, a substitute for good B, will shift the demand curve of good A to the right, as people will substitute away from good B to good A and will be willing to pay more for it (Begg et al., 2008: 42).

As we saw before in figure 5, a budget line models the income constraint for consumers when choosing bundles of good A and B. The slope of a budget line depends on

how much of one good must be sacrificed to get the other good, so on the ratio of the prices of the two goods (Begg et al., 2008:77).

When the price of a good increases, the budget line will rotate inwards around the most extreme point in favor of the other good, see figure 9. The affordable bundle of goods that maximizes utility will then contain less of the first good at the same amount of the other good (Begg et al.,2008:85). In our example: when the prices of theater tickets increase, the budget line will rotate around point A, where all money is spent on movie tickets, and less theater tickets will be affordable at the same amount of movie tickets.

Figure 9: Changing budget according to price changes



The new budget line has two consequences: first, the budget line has become steeper, which means that more movie tickets must be sacrificed in order to gain a theater ticket and second, the line has shifted to the left, lies inside the ‘old’ budget, and therefore the purchasing power of the consumer has diminished although his income has stayed the same (Begg et al.,2008:85).

As will be explained in the next section (3.7) of this theoretical framework, the influence of a price change of one good on the demand for another good, is expressed by calculating the cross-price elasticity of demand. When goods are substitutes the figure for cross-price elasticity of demand is positive: a higher price of good A increases demand for good B. The better a substitute, the higher the (positive) cross-price elasticity number. But even when the other good is not a perfect substitute, an increase in relative price of a good will always create an effect away from it, whether or not it will be (completely) captured by a substitute (Begg et al., 2008:89-90).

The influence of prices of related goods depend on the characteristics of a product. For example, the more competitive characteristics a performance has, the higher cross-price elasticity of demand. The more ‘highbrow’ and unique or ‘blockbuster’, the less sensitive a production is to box-office prices of other productions. These characteristics depend on consumer preferences (Blankers et al., 2012: 130,131).

3.7. Elasticities of demand

The price of a good, consumer income and prices of other goods influence demand for a good (Begg et al., 2008: 56). To describe to which degree these factors influence demand for a good, their elasticity figures are calculated. These figures describe the percentage change of demand due to one percent change of the other three factors.

To explain price and income elasticity of demand for cultural activities, the determinants that are used to purely calculate them are not enough, since changes in demand are not just caused by changes in prices of goods or consumer income. That is the function of consumer theory: to explain the underlying relationships (Blankers et al., 2012: 129).

3.7.1. Price elasticity of demand

As stated above, the slope of the demand curve, figure 6 (and whether it is a straight line or curved), depends on the characteristics of a good, its price elasticity included (Begg et al., 2008: 55). PED is an abbreviation for price elasticity of demand, also referred to as demand elasticity (Begg et al., 2008: 56).

$$\text{PED} = (\% \text{ change in quantity}) / (\% \text{ change in price}).$$

Using this model it is possible to calculate the figure for PED for every price change on the demand curve (figure 6), by dividing the percentage change in quantity that appears for any percentage change in price.

In this case demand falls when prices rise, so the figure for PED is preceded by a minus sign. For most goods demand curves slope down, therefore their changes in price and changes in quantity have opposite signs and demand elasticity is a negative number. But the minus sign is often left out, because nearly all goods have a negative PED number (Begg et al., 2008: 56).

The figure for PED expresses whether demand for the investigated good or service is elastic, inelastic or unit-elastic. If the figure exceeds -1 demand is elastic (Begg et al., 2008: 58), an increase in price within this range will lead to a decrease in demand. The more elastic demand for a good is to price changes, the decrease in quantity demanded. The figure for PED differs per point on the demand curve. The higher the starting price, the more demand will be elastic to price changes.

Demand is inelastic when PED lies between 0 and -1 (Begg et al., 2008: 58). At these points on the demand curve an increase in price will lead to a negligible change in demand.

At $PED = -1$ demand is unit-elastic (Begg et al., 2008: 58). At this point total spending of consumers is unchanged when prices rise or fall. It is the turning-point for price elasticity of demand on the demand curve. Total spending is the price times the demanded quantity, e.g. how much is spend by consumers at a certain price. Beginning at high prices and moving down along a demand curve, total spending will first increase and then decrease. At the turning point, demand is unit-elastic. (Begg et al., 2008: 61). In the example (see 3.2. and appendix B): when box-office price to the performance rises from € 20 to € 21, PED remains - 1 and income from box-office sales remains unchanged.

Knowledge of PED for commercial theater in particular is limited, since former research had analyzed this for either just subsidized theater or for commercial and subsidized theater together (Goudriaan, 2010: 6). To be able to forecast, estimate or simulate changes in demand for commercial theater after increased box-office prices due to increased VAT, the figure for PED for commercial theater is needed (see further in chapter 4 and 6).

3.7.2. Income elasticity of demand

Income is one of the variables influencing consumer behavior and its relationship to the quantity demanded is positive: when consumer income increases, demand for (cultural) goods increases as well. The figure of income elasticity of demand expresses the change in quantity demanded due to the change in consumer income (Towse, 2010, p.148). To calculate the figure for income elasticity of demand, the percentage change in quantity needs to be divided by the percentage change in income (Begg et al., 2008: 65).

3.7.3. Cross-price elasticity of demand

When calculating the own price elasticity of a good, all other factors are remained constant, only the changes in price of the examined good is changed. When calculating the cross-price elasticity of demand, the own price of the examined good and consumer income remain constant and elasticity is calculated for price changes in *other* goods. When a rise in price of good A increases the quantity of good B demanded, cross-price elasticity is positive. In general this is the case when good A is a substitute for good B (see figure 9). When goods A and B are complements, their cross-price elasticity figure will be negative (Begg et al., 2008: 64).

Although in this research neither the effects of price changes for substitutes of theater on the demand for theater tickets, nor the effects of increased box-office prices on the demand for substitutes of theater are discussed, it is useful to address this cross-price elasticity of

demand. This model explains that when for example movie tickets are supposed to be a substitute for theater tickets, it is likely that part of the audience will substitute away from theater when prices of theater tickets have increased.

3.8. Conclusion

Demand for theater depends on the selection process of consumers which can be analyzed through theory of consumer behavior and expressed in a demand schedule.

A figure for price elasticity of demand for theater tickets is needed to calculate the possible change in demand when prices increase.

From this chapter can be concluded that, in order to investigate whether an increase in VAT on theater tickets in The Netherlands leads to an increase in box-office prices and/or a fall in demand, two variables need to be analyzed: prices of and demand for theater tickets. However, a change in consumer income and/or the prices of substitutes might also have caused a shift in demand for theater tickets.

4. FORECASTED EFFECTS OF VAT INCREASE

4.1. Introduction

The starting point for this master thesis is formed by the rapport the research company *Ape* presented in November 2010 (Goudriaan, 2010), the same company that evaluated the effects of the lower VAT-rate in 2008 (Goudriaan et al., 2008) (see 2.3.). The VVTP instructed *Ape* in 2010 to investigate the possible effects the VAT-raise (by July 2011, see figure 5) would have on them (Goudriaan, 2010: 3).

Another question that was raised in this study is whether the calculators of income to the government from the VAT-raise on theater tickets, also took into account the possible decrease in demand (Goudriaan, 2010:7,8). If a fall in demand after increased box-office prices was not taken into account, then income to the government from the VAT-raise would probably be disappointing.

This chapter will outline this research done in 2010. The outcomes will be summarized in the conclusion. The hypotheses formulated in the next chapter are based on these outcomes (Chapter 5).

4.2. Method and data

The 2010-rapport starts off by calculating a ‘new’ figure for PED for commercial theater. Data on attendance and income during the years before (from 06/07 on), have been gathered at the individual VVTP-members and at the Central Bureau for Statistics in The Netherlands (in short: CBS) (Goudriaan, 2010: 9). The figure for PED is then isolated from a model that estimates the effects of ‘ticket prices’ on demand.

Then the new found figure for PED is implemented into a model that was developed in the rapport in 2008 on the evaluation of the *lowered* VAT-rate for performing arts (see chapter 2.3.) (Goudriaan, 2008), which is based on the theory of consumer behavior in micro economics and contains the variables of demand theory (see chapter 3): ‘ticket prices’ for commercial productions, the consumer price index of substitutes and consumer income (Goudriaan, 2010: 10).

The effects of including the VAT-raise into the box-office prices are addressed using this model. The outcomes are used to describe the possible effects on income of and employment at the producers, income of subcontractors and the income to the government from the VAT-raise.

4.2.1. Remark

In this research ‘ticket prices’ are approached as revenue to the producer divided by the number of attendances. However, as explained in chapter 2.2.4. and showed in figure 3, this reveals the average income per visit to the producer, which is *not* the same as box-office prices. Ideally box-office prices change by the same percentage as revenue to the theater and the producer, but this is not realistic. When revenue to the producer falls, this can be caused by other factors besides decreased box-office prices, for example: a fall in guarantee sums, a raise in supplements, an increase in VAT, a decrease in percentage share to the producer out of box-office income to divide and so on. However, in the 2010-rapport the average income per visit to the producer is regarded as ‘ticket price’ and used as a variable to explain the hypothetical outcomes. This makes describing the method and interpreting the results of this rapport somewhat complicating. The figure for PED is calculated using this average income per visit to the producer, whereas statements about consumer reaction to price changes can only be made using prices consumers actually see and base their choices on: box-office prices.

However, the effects that were forecasted in 2010 are reliable since they describe overall possible effects of the VAT-raise on commercial producers. These results are set forth in the next paragraph, which shows that they are realistic expectations.

4.2.2. The model

The model used to describe the development of attendance to productions of commercial producers, is based on the micro economic theory of consumer behavior, e.g. theory of demand (chapter 3). It was impossible to include taste formation into the model in 2010, due to the relatively short period of time for which data on attendance and average income per visit could be gathered.

The model contains three variables:

1. Income per visit to commercial producers
2. Consumer price index of substitutes
3. Available consumer income

Given the data structure (a cross-sectional time period) the model is based on panel data estimations with fixed effects. This means that for every VVTP-member an individual fixed effect is calculated, to take specific circumstances and the difference in genres out of total offer of different VVTP-members into account. Because for the price index of substitutes only

data on a national level is available, the figure for price elasticity of demand for substitutes is a priori supposed to be the same as the PED-figure for theater productions, only with an opposite sign (Goudriaan, 2010: 17-18).

4.3 Results

Price elasticity of demand

The price elasticity of demand for VVTP-members is calculated. Prior to these calculations, two statements were set forth to formulate an hypothesis. First of all box-office prices for commercial productions are generally higher than box-office prices for subsidized productions and second, the audiences to commercial theater are less well-off than those to subsidized theater (Van den Broek et al., 2009). Apart from that, box-office prices have increased strongly over the previous years (Goudriaan, 2010:6). Based on these three factors, Goudriaan expects demand for commercial theater productions to be relatively strong elastic to price changes and the figure for PED nowadays to be on the more elastic part of the demand curve than it was found at in 2008 (Goudriaan, 2010: 6).

The figure for PED that is found for commercial theater productions is -1,09. As stated above, this figure is found using average income to the producer for the variable 'ticket prices'. Therefore it does not express the real reactions of consumers to changes in box-office prices for commercial theater, but it is used in this 2010-rapport to describe the effects of the VAT-raise. Whether or not this figure for PED is reliable, for now it is enough to conclude that demand for commercial theater is price elastic. Previous performed studies (both in The Netherlands as well as in other countries) have found figures for PED for theater also showing a price elastic character of theater in general (Seaman,2005: 52-57).

Furthermore demand for theater tickets appeared to be very sensitive to consumer income. With a moderate fall in income, demand for theater decreases strongly (Goudriaan, 2010: 10).

Box-office prices

If the VAT-raise of 13 percentage points (from 6 to 19%) would be completely included in the box-office prices, then this would lead to an increase in box-office prices of 12,3% (Goudriaan, 2010: 10) . If before the VAT-raise a ticket costs € 10 at the box-office, then it will cost € 11,23 after the VAT-raise ($10 \times 119 / 106 = 11,23$). This increase of € 1,23 means an increase in VAT of 13% will lead to an increase in box-office price of 12,3%.

Attendance

Given the PED estimation in this research, the increase in price of 12,3% will then cause a decrease in demand of 13,5% (1 million) for the VVTP-members. This fall in attendance is added to the drop that had already occurred in 09/10 (Goudriaan, 2010: 11).

Performances of commercial producers compete with other entertainment. Therefore the attendance to these productions is sensitive to the number of PED for substitutes (movies, theater, and so on). The fall in demand might turn out to be even bigger if the lower VAT-rate of 6% remains maintained for substitutes as movies, circus and other entertainment. The price difference that already existed between theater and movie will be enlarged.

Income of producers and employment

After the VAT-raise, revenue to the producer will decrease by the same percentage as demand (13,5%) which is more than 18 million Euros. This decrease is added to the previous decrease in income of 45 million Euros, caused by the attendance drop in 09/10. Producers will be unable to compensate for the income loss by increasing box-office prices, because demand would fall even more (Goudriaan, 2010: 11).

A decrease in income will possibly force a loss in employment. If this corresponds to the income loss of 18 million Euros, then 250 fulltime jobs will be lost at the VVTP-members (Goudriaan, 2010: 11).

Other sectors

CBS-figures show that the box-office prices only form a part (ca 60%) of the costs of a visit to the theater. This means that the decrease in demand, will lead to a supplementary turnover loss of approximately 15 million Euros in other economic sectors (Goudriaan, 2010: 11).

Apart from consumers, theater producers themselves spend in other sectors of the economy. It is assumed that spending will decrease as much as demand (13,5%). This results in a turnover decrease of 12 million Euros in other sectors. In total the spending in other sectors of the economy will decrease by 27 million Euros (Goudriaan, 2010: 11,12).

Governmental gain

In the governmental ordinance that announced the VAT-raise, the income to the government of the VAT-raise is estimated at 90 million Euros, half of which should come from performing arts. When this was calculated, the Dutch ministry of Finance did not take into account the drop in demand due to raised box-office prices (Goudriaan, 2010: 12).

The income to the government from VAT on commercial theater producers will be 3 million Euros less than what was hoped for after the VAT-raise. For the other performing arts, the figures will be similar. Apart from that the spending in other sectors of the economy will be less. Due to this, the VAT-output to the government from these sectors will also be 4 million Euros less than usual (Goudriaan, 2010: 12).

Based on the theory of consumer behavior and the figures for price elasticity of demand for theater, Goudriaan concluded that income to the government from VAT on arts sectors will be 10 million Euros less than before the VAT-raise. This means that 20% of the planned VAT-outcome will not be met (Goudriaan, 2010: 12).

4.4. Conclusion

The expectations regarding the effects of VAT-raise for VVTP-members were based on the theory of consumer behavior and a calculated figure for price elasticity of demand. This formed a solid background to conclude that (1) demand for VVTP-productions will drop, therefore (2) income and (3) employment will decline, (4) spending of VVTP-producers in other sectors will decrease and (5) the governmental gain will fall 20% short of the 45 million Euros that were hoped for.

These predicted effects form the basis for the hypotheses of this research, which will be set forth in the next chapter.

5. HYPOTHESES

Which short-term effects of the VAT-raise can be found for commercial theater producers?

To investigate this a theoretical framework has been set up of elements on the market for theater including VAT (chapter 2), theory of consumer behavior and elasticities of demand (chapter 3).

The model of consumer behavior is used to predict the reaction of consumers to changes in market conditions and explains how and why they react to price changes. Demand for a product, in this case a commercial theater ticket, depends on its own price, prices of substitutes and consumer income.

In the previous chapter the forecasted effects of the VAT-raise on demand for, income of and employment at commercial theater producers were set forth. An hypothetical effect on other sectors was also given: it was expected that due to decreasing income of producers, they would spend less themselves in other economic sectors. In this thesis the effects of the VAT-raise to commercial theater producers is the focus point, so the effects on other sectors (subcontractors) will be left out.

To answer the main research question, the effects on box-office prices, demand for commercial theater productions, income of producers and employment at producing companies will be analyzed for the period before and the one after the VAT-raise. Also a final effect will be examined, namely the income to the Dutch government of the VAT-raise, to answer the question posed in the title: ‘who was right?’.

In this chapter five hypotheses are given and their theoretical base set forth. Then, in the next chapter, the methods used and data needed to test these hypotheses are described further.

1. Box-office prices for commercial theater productions have increased after the VAT-raise.

If the complete raise in VAT of 13 percentage points, would be calculated into the box-office prices, then the prices of theater tickets would have to be raised with 12,3%.

Box-office prices ‘normally’ increase every season compared to the previous one. This leads to the expectation that when negotiating on contracts, theaters and producers might not

decide to also include the VAT-raise in the box-office prices, apart from this 'normal' raise. Completely capturing the VAT-raise themselves would mean a loss in box-office income of 13,5 % to the theater sector, given the figure for PED of -1,01.

All factors that influence demand for the productions and changes in income, will be taken into account when box-office prices are negotiated. Theaters and producers will agree to a box-office price that more or less captures the increased VAT and the according expected drop in demand for commercial theater.

The popularity of comparable productions will have stayed constant over the years, consumer tastes are supposed to remain constant and in favor of the same productions they were before the VAT-raise. However, when prices increase and income decreases, the consumers will choose a good or bundle of goods that provides the same utility but costs less, one that lies lower on the indifference curve.

It is expected that box-office prices have increased slightly more in season 11/12 than in previous 'normal' theater seasons. In order to both prevent a fall in demand and diminish a fall in income, theaters and producers will have decided not to include all but a percentage of the VAT-raise into the box-office prices. Therefore it can be concluded that the VAT-raise has led to an increase in box-office prices for commercial theater.

2. Demand for commercial theater decreased due to the VAT-raise.

In the model for cultural participation an increase in VAT will not influence the ability to enjoy information and gain social regard, since tastes and preferences are assumed to have stayed constant. An increase in VAT that leads to an increase in box-office prices, will influence the monetary and with that the time budget. Even if monetary budgets stay the same, the financial cost of theater and with that also the time cost of theater increases.

Supposed box-office prices have increased for commercial productions, combined with what is taught by consumer theory and the price elastic character of demand for theater, it is expected that demand for commercial theater has decreased after the VAT-raise.

Changes in price cause movements along the demand curve, changes in other factors (tastes, income, prices of substitutes) cause shifts in the position of the demand curve. If not only box-office prices have increased, but consumer income has decreased, demand for commercial theater will have fallen even more, due to the strong income elastic character of commercial theater. The purchasing power of consumers diminishes when prices of goods increase and/or when monetary budgets decrease.

Also prices of substitutes as movies, sports events and circus have stayed under the 6 % regulation. Based on the figure for cross-price elasticity it is expected that this will cause an additional decrease in demand. Although in court it was decided that movies, sport events and circus are no true substitutes when it comes to the principle of fiscal neutrality, they are regarded as substitutes for theater in cultural economics.

The VAT-raise will cause a decrease in demand for commercial theater due to (1) the price elastic character of theater, (2) a fall in consumer income for the same period, (3) the cross-price elastic character of theater and the fact that prices of substitutes only had to increase 'normally' since VAT on movies, sports events and circus have stayed the same.

3. Commercial theater producers experienced negative effects on income of the VAT-raise.

A drop in demand which is too much to be covered by an increase in box-office price, is experienced as a loss in revenue to the theater and the producer (see figure 3). The 'normal' box-office price increase, which corresponds to the consumer price index, does not lead to a drop in demand and a loss in income. The new VAT-regulation however, will lead to a 'more than normal' price increase and will therefore cause a drop in demand and a loss in income.

The difference between the 'normal' percentage of price increase and the one that was performed from 10/11 to 11/12 is the increase that can be attributed to the VAT-raise. This percentage should ideally meet the 12,3%, which was the percentage increase in box-office prices the VAT-raise of 13 percentage points would cause. If the 'extra' percentage increase that was performed is less than 12,3%, it means the producers have partially captured the VAT-raise in their revenue from box-office income. As seen at the first hypothesis, commercial producers will probably have decided to do so when negotiating on contracts with theaters, to prevent box-office prices from increasing too much at once. This means their average income per visit decreases compared to the previous season, which causes a loss in income, apart from the decrease in income caused by a fall in demand.

Where the disadvantage of increased VAT on theater tickets is experienced the most, depends on the form of contract. With a buy-out contract, the disadvantage will end up at the theater, with a rental contract it will be at the producer and with a split it will be shared between the theater and the producer. However, due to an expected decrease in demand after an increase in box-office prices, theaters might lower guarantee sums on the purchase market, which would then be the third negative effect on income to the producer.

Summarizing, the commercial producer will experience three kinds of negative effects on income after VAT has been increased in the theater sector: (1) a drop in demand for commercial productions, (2) a decrease in income per visit due to capturing a part of the VAT-raise himself and (3) a decrease in guarantee sums.

4. Employment at commercial producers has decreased due to the VAT-raise

Commercial theater producers will have cut back the number of working hours and jobs due to decreased income. When companies experience a drop in income, then their ability to keep their employment on the same level is set back. The decrease in employment is expected to be similar to the drop in demand and income.

Also the compensation of increased labor costs due to the regulation of working hours, which was the intention of lowering VAT in 1998 (see chapter 2.3.) will diminish and with that employment in a labor intensive sector as the performing arts stimulated less than before the VAT-raise.

5. The intended raise in income to the Dutch government from VAT was not met during the first year.

Goudriaan expected the real increase in income to the government from the VAT-measure for performing arts to fall 20% short of the aim that was set (Goudriaan, 2010: 12). This statement was made based on data from VVTP-members, but is expected to hold for other theater producing companies as well since their economic circumstances are the same.

In 2008 *Ape* (Goudriaan et al., 2008) not only calculated the loss of income to the government from tax on culture and media after the 6% regulation was implemented, but also the loss that would have still be experienced had the VAT-rate stayed 19% (see chapter 2.3.). The Ministers Plasterk and De Jager based their positive reaction on the results of this evaluation and concluded that at that time (2009) there was no reason to reverse the measure and set the VAT-rate back at 19%. However, despite this knowledge and these conclusions, one year later it was decided that the higher rate should be reinforced. Therefore it can be assumed that the calculated increase in income to the government of 45 million Euros that was calculated by the Ministry of Finance in 2010, does not include a possible drop in demand and will therefore not be met.

Although the calculated figure for PED and the according drops in demand for and income of the commercial producers were based on the average income per visit to the producer, not real box-office prices, and the found 20% shortfall of the intended increase in

income to the government from VAT is therefore also based on ‘wrong’ conclusions, it can be expected that the VAT-raise caused an increase in box-office prices, which caused a drop in demand. Since this drop in demand was not taken into account when the increase in income to the government from VAT of 45 million Euros from the performing arts sector was calculated, this financial goal was not met and therefore *Ape* (Goudriaan, 2010) was right: the measure did not have the desirable effect.

These hypotheses are tested through analyzing data. In the next chapter the methods for testing are set forth and the results of this will provide an answer to the central question and to the question on ‘who was right’ (chapter 7).

6. METHOD

6.1. Introduction

This chapter will outline the method that was used to conduct this research and retrieve the results to test the hypotheses. The method that was most suitable was performing case studies. Selecting a research method depends on the main research question, the availability of data (Gilbert, 2008: 35) and the kind of research. Since the VAT-raise was only applied during one theater season and this particular season has ended not so long ago, the effects needed to be analyzed on a relatively short-term and analyzing trends was impossible. Questioning all nineteen VVTP-members in detail would be too extensive for this master thesis. Therefore three commercial producers have been selected, differing in size and producing genres.

First the case-study method in general, with its benefits and limitations, will be outlined, followed by an explanation of applying this method to this particular research. Then an extra subchapter will set forth which new information was found while writing this thesis, followed by an explanation of collecting data to test each individual hypothesis. The concluding paragraph will outline the next step from this chapter on method to analyzing the results.

6.2. Case-study design

The most suitable research method to conduct this research on the effects of the VAT-raise were experienced by commercial theater producers is performing case studies. This deductive process makes it possible to test the theory (Gilbert, 2008: 27) upon which the five hypotheses described in the previous chapter are based.

Case-studies are selected carefully and then studied intensively. The cases that are studied are not selected randomly, but are considered representative. The number of selected cases differs per study, but the sample that is chosen should be as large as is representative of the whole population. In that way the average opinion of the selected cases can be used as an indicator of the population's average opinion (Gilbert, 2008: 36).

The limitations of case-studies lie with the problems or even impossibility to generalize findings. Research has to be specific for one field and not needed to be extrapolated into another area. However, conducting so called 'critical case-studies' is useful

when testing a theory via a deductive strategy. In this way research is more detailed than it would be when studying a larger sample (Gilbert, 2008: 36-37).

Although when conducting the case-studies for this research also figures were used, the research design remains qualitative (vs. quantitative): primary data are mostly gathered through interviews.

Since the theater season during which the VAT-raise was applied has ended only a couple of months ago, the data are collected at one moment in time and the research design is therefore cross-sectional (vs. longitudinal) (Gilbert, 2008: 36).

6.3. New information

While this master thesis was developed, *Ape* presented a new research rapport in November 2012, describing the effects of the economic crisis on cultural sectors in The Netherlands (Blankers, 2012). The rapport describes the economic situation of cinemas, museums and performing arts organizations, regarding demand, supply and income (Blankers, 2012: 7). The development of these factors are both analyzed per discipline (museum, performing arts, visual arts and movies) as well as per category of income structure: subsidized or non-subsidized (Blankers, 2012: 22).

The VVTP is one of the investigated groups of organizations. The rapport describes trends using data on changes in demand for theater and income of and employment at commercial producers, from 2005/2006 through to 2011/2012. These results have provided useful secondary data for this master thesis, since it also covers the theater season for which VAT had been increased, 2011/2012.

Not only is the figure for PED revised and indicated at -0,72 (however, again based on average income per visit to the producer), the rapport also describes the strong effects of the economic crisis on commercial producers (Blankers et al., 2012).

The new figure for PED weakened the expected effects of decreases in demand, income and employment. Calculating a new figure for PED that represented all commercial producers for this master thesis was impossible, due to the unavailability of data and the case-study design.

6.4. Data

Quantitative data

The 2012-rapport (Blankers et al., 2012) contains data that were provided by five VVTP-members since 2005/06, including season 2011/12⁹. With this relatively small population size, one organization can enlarge the sample and influence the outcomes (Blankers, 2012: 81).

Prices of substitutes are extracted from the consumer price index for culture and recreation at the CBS (Blankers, 2012: 27).

Qualitative data

To explain trends in quantitative data and to complete the view on the results, qualitative interviews were conducted.

At each interview the same questions were posed to three selected commercial theater producers in semi-standardized interviews, so that where needed other questions could be inserted during the interview to probe for more information (Gilbert, 2008: 247, 248). For the interview schedule see appendix B.

The commercial producers were selected based on their availability and their difference in company size and produced genres. They are referred to as producer A, B and C in this thesis instead of their real names, to extract most honest answers.

The questions provoked subjective reactions (Gilbert, 2008: 207) of the commercial producers and therefore supplied qualitative data, whereas the facts and figures that were extracted from the 2012-rapport make up for the quantitative data.

6.5. Data collection per hypothesis

Hypothesis 1

To test whether box-office prices have increased after VAT on theater tickets was raised, data in the 2012-rapport that explain this trend are analyzed. In this rapport the ‘ticket prices’ are approached by calculating the average income per visit to the producer. In this way the figures are corrected for discounts, free entrance and shifts in interest between the different museums, organizations or theaters (Blankers et al., 2012: 26). However, these ‘prices’ can be quite different from the real price a consumer paid at the box-office and therefore do not reflect the negotiations between theater and producer and the prices to which consumers will respond.

⁹ Not all VVTP-members could be included due to gaps in data provision.

Consumers pay the box-office prices at the theaters, therefore the trends in changes in ‘ticket price’ of the VSCD-theaters can be used to describe changes in box-office prices, prices on the consumption market (Blankers et al., 2012: 179).

These figures will be taken into consideration when conducting the interviews. In the interviews questions were posed on the attitude of the producers, during negotiations on contracts, towards calculating the VAT-raise into the box-office prices. To find out whether the VAT-raise has played a part in this and caused an increase in box-office price, the producers will be confronted with the forecasted effect (box-office prices have increased) and asked whether they considered this to have come true.

Combining these qualitative and quantitative data, will provide an answer to whether this first hypothesis can be verified or falsified.

Hypothesis 2

To test whether demand has decreased after VAT has increased, data is extracted from the 2012-rapport that lead to the analyzed trend of decreasing demand for commercial theater. Which part of this can be contributed to the VAT-raise is very hard to analyze at this time and probably will also be in a couple of years, since it has only been applied during one theater season. To analyze what the effect of the VAT-raise is on demand for commercial theater the trends in demand, the changes in average income per visit to the commercial producer and box-office prices at the VSCD-theaters will be combined with the figures for PED for the VVTP and the VSCD.

Besides this the difference in consumer income between the years 2011 and 2012 will be analyzed to describe it’s influence on demand for theater during season 11/12.

The producers will be asked what their ideas on the effects of the VAT-raise on demand for their products are.

Hypothesis 3

To analyze changes in income of VVTP-members, the trends in demand for and revenue to the producer from box-office income described in the 2012-rapport are combined with the answers of the commercial producers in the interviews. In 2010 it was expected that the VAT-raise would be completely calculated in the box-office prices and a loss in income to the producer would therefore ‘only’ be caused by a decrease in demand. However, hypothesis 1 shows that it is expected that producers and theaters will have agreed to partially capture the VAT-raise at the box-office and take the rest of the loss themselves in their revenue from box-

office income. This might also result in theater to take precautions and lower the guarantee sums . It is impossible to determine the exact part of income loss that can be attributed to the VAT-raise.

Therefore to verify or falsify this hypothesis this effect will be ‘cut into pieces’. (1) Changes in income of the producer and average income per visit will be analyzed in the 2012-rapport, and (2) producers will be asked whether they experienced a decrease in guarantee sums or other ways in which theaters decisions of theaters have affected their incomes. These outcomes combined with the findings under hypotheses 1 and 2, provide the basis for verifying or falsifying this hypothesis.

Hypothesis 4

The 2012-rapport shows the (decreasing) trend in employment at the VVTP-members. To approach which part of this can be contributed to the VAT-raise, the producers will be asked in the interview whether the amount of fte’s per production and at their office has decreased during or after season 11/12 compared to season 10/11. To analyze whether this is (partially) due to the VAT-raise, the findings on income under hypothesis 3 will be combined, since effects on income will have effects on employment at companies.

Hypothesis 5

The changes in box-office prices (hypothesis 1), demand (hypothesis 2) average income per visit and revenue to the producer form box-office income (hypothesis 3) will be used to estimate whether the financial goal set by the government was met. Based on this the income to the government from VAT on VVTP-members can be estimated, which can then be estimated for the whole theater sector. If these trends together show that the intended increase in income to the government from VAT on the performing arts is most probably less 45 million Euros, this hypothesis is verified and *Ape* (Goudriaan, 2010) ‘has won the battle’.

7. RESULTS

Introduction

In this chapter the results that were found through conducting the three interviews and analyzing secondary data will be set forth and analyzed. Every hypothesis will be tested and verified or falsified at the end, so in the next chapter, the conclusions of this research, an answer to the main research question and to the question ‘who was right’, can be formulated.

Testing the hypotheses

1. Box-office prices to commercial theater productions have increased after the VAT-raise.

Quantitative data

Since the price changes that are calculated in the 2012-rapport describe changes in income per visit to the producer (Blankers et al., 2012: 26), these figures cannot provide an answer to the question whether box-office prices for commercial theater have increased during season 2011/12. As explained in chapter 2.2.3., these figures retrieved from the acquittals at VVTP-members can be quite different from the prices consumers paid at the box-office.

Box-office prices are determined by the theaters and the producers together when negotiating on contracts. Therefore the increase in box-office prices should be revealed in data on prices that were supplied by the theaters (Blankers et al., 2012: 51-66, 179). Since these prices are exclusive VAT and divided by the number of visitors, they express the average box-office income per visit *at* the theater (see figure 3 and 4), which are therefore the box-office prices exclusive VAT.

These box-office prices exclusive VAT are given per year, not per season, from 2005 until 2011. Unfortunately, more than half of season 2011/12 is not revealed in these data. However, since contract negotiations take place six to eight months before the theater season commences, the box-office prices from September to December 2011 are negotiated on in spring 2011 and set at a certain amount. These months are also calculated into and therefore revealed by the average box-office prices exclusive VAT. Figures show that these prices have decreased with 4,4% in 2011 compared to 2010 (Blankers et al., 2012: 179). Although the average box-office prices exclusive VAT are unknown for the rest (January-June) of season 2011/12, it can be expected that these prices have decreased during season 2011/12.

However, to express the real box-office prices, the prices that consumers paid for a theater ticket, VAT needs to be included. The average box-office price in 2010 is € 14,76 inclusive 6% VAT. From January until June 2011 the lower VAT-rate was still applied, from July until December 2011 VAT was increased¹⁰. Inclusive 6% VAT the average box-office price is € 14,11 and inclusive 19% VAT the average box-office price is € 15,84 (Blankers et al., 2012: 179).

These figures indicate a *rise* at the box-offices, of 7,32 % for September-December 2011 compared to 2010. The average box-office price seems to have decreased for January-June 2011, where the VAT-raise was not yet implemented, compared to 2010. And the increase from September-December 2011 compared to January-June 2011 is 12,26 %, but the prices for January-June 2011 were set in spring 2010, when the VAT-raise was not yet announced.

These figures show that the VAT-raise did cause an average increase in box-office prices for *all* theater productions at VSCD-theaters, most probably by around 7,32 %. Based on these secondary (quantitative) data, it can be concluded that box-office prices to commercial productions did increase after VAT was increased, but not enough to ‘protect’ the producers from needing to capture a part of the VAT-raise in their own revenue from box-office income.

Qualitative data

The three producers individually agreed that discussion on calculating VAT into box-office prices differs per form of contract, and stated that the most used contract form is ‘split with guarantee sum’. Hardly any production is sold via buyout and when it is, then it is for smaller productions in smaller halls with lower box-office prices.

All three producers confirmed that while box-office prices for theater season 11/12 were negotiated on, it was clear that VAT would increase per July 1st 2011. All three wanted to increase box-office prices with the same percentage as VAT increased, because all three of them state that demand for their productions is not much influenced by the (height of) box-office prices. What matters is the popularity of a production and the circumstances of consumers. Theaters did not always agree to increase box-office prices by 12,3 %. Whether they were able to convince the theaters to increase box-office prices after the VAT-raise differs per producer.

¹⁰ Often the months July and August are not included in theater seasons, but the VAT-raise was implemented at July 1st 2011

Producer A stated that most theaters agreed to raise box-office prices after the VAT-raise, however not always with the full 12,3% that was needed. Sometimes it was chosen not to increase box-office prices by the full percentage, when prices that consumers needed to pay at the box-office would then end up over a certain level, for example over € 30. 'For psychological reasons it was then decided to stay under € 30', producer A states, indicating the assumption that consumers are more willing to pay € 29,50 than € 30,50. A few theaters found box-office prices too high already and therefore plead not to increase them by the full percentage. Producer A stated that when a rise in box-office prices was agreed on for season 2011/12, this was completely due to the VAT-raise.

Producer B stated that no theater was willing to increase box-office prices with the 12,3% that was needed after the VAT-raise, because theaters feared decreases in demand. This difference in experience is probably due to the different price levels the productions are in: box-office prices inclusive VAT for productions of Producer A cost are between € 20 and € 30, whereas those same prices for productions of Producer B are between € 50 and € 60. Producer A and B differ in most produced genre. Box-office prices differ per genre: comedy tickets are cheaper than those for drama, those for drama are cheaper than tickets to musical and international shows. As producer B says: '13% out of € 55 is more than 13% out of € 20'.

Producer C said whether or not the VAT-raise was calculated into the box-office prices differed per theater and per production. He stated this was caused by the differences in attitudes of theater managers: some wanted to sign a signal to the audience saying 'we think about your money' (e.g. not include VAT-raise in box-office prices), other theaters wanted to show they spared the producers (e.g. include VAT-raise in box-office prices).

Stepwise raising box-office prices to be able to reach a raise of 12,3% at the box-offices compared to the price level before the VAT-raise was implemented, seemed not to have been a strong point of negotiation. Either theaters agreed to increase box-office prices after the VAT-raise or they did not.

Verified or falsified?

The difference in experience when negotiating on box-office prices explains the average rise of 7,32 % at the box-offices that was found: not for every production the box-office prices were raised with 12,3% and not for every production had prices not been raised at all.

Box-office prices have increased with 7,32% and income per visit to the producer has decreased with 5,5%. These figures show that box-office prices have increased after the VAT-raise but not by the full 12,3% that was needed (and was predicted) to cover for the VAT-raise. Therefore the theaters and commercial producers have captured a part of the VAT-raise in their own revenue from box-office income. For some commercial productions box-office prices were raised after the VAT-raise and for some others they were not. Whether or not theaters agreed to do so, depended on the negotiations with theaters.

Before season 2011/12 box-office prices at VSCD-theaters decreased, in 2011 they also would have, had the VAT-rate been kept at 6%. Inclusive 19% VAT, box-office prices increased by 7,32%. In the 2010-rapport it was expected that 'ticket prices' would be raised with 12,3%. By that box-office prices were meant (since these 'ticket prices' were also used to calculate effects on demand), but the average income per visit to the producer was calculated. However, both average income per visit to the producer as well as box-office prices did not increase by 12,3%. Assuming Ape meant to forecast an increase in box-office prices, then this partially came true.

The hypotheses that box-office prices increased after VAT increased is verified.

2. Demand for commercial theater decreased due to the VAT-raise

Quantitative data

The theater sector is amongst the arts sectors that have experienced the biggest fall in demand during the economic crisis. Theaters have had to cope with demand decreases and the effects on attendance are most negative for VVTP-members compared to the other investigate groups of cultural organizations. This trend also shows in season 2011/12 (Blankers et al., 2012: 10).

In 2010 a figure for price elasticity of demand of -1,09 was found for VTTP-productions. An increase in VAT of 13% would cause an increase in average income per visit of 12,3%, which would then cause a decrease in demand of 13,5 % (Goudriaan, 2010: 3). In 2012 a new figure for PED for VVTP-productions was found: -0,72 (Blankers et al., 2012: 154). Both these figures were however based on average income per visit, whereas a figure for PED describes consumer reactions.

When testing the previous hypothesis an increase of 7,32% in box-office prices at the VSCD-theaters was found for season 2011/12 (Blankers et al., 51-66, 179). Using this percentage increase and the new found figure for PED to calculate the effect on demand, is impossible since they are regarding two different audiences and 'ticket prices'. However, using this new figure for PED and the income per visit to the VVTP-member would also not

provide the right answer to the question whether the VAT-raise has led to a decrease in demand, because consumers do not get confronted with the average income to the producer when buying a ticket (see figure 3).

Using a figure for price elasticity of demand at VSCD-theaters to explain effects on demand for commercial productions is also impossible, since commercial productions only make up for 33,3% out of total supply at VSCD theaters and the figure for PED therefore more expresses non-VVTP productions than VVTP-productions.

Concluding: there is no figure for PED so far that could explain a fall in demand for VVTP-productions after an increase in box-office prices.

However, demand to both VVTP-productions as to the VSCD-theaters both decreased: demand for VVTP-productions decreased with 13,9% in season 2011/12 (Blankers et al., 2012: 181) and demand for performances at VSCD-theaters with 4,2% in 2011 (Blankers et al., 2012: 177). The fact that the trends of decreasing demand had already been started before VAT increased (Blankers et al., 2012: 10, 59), indicates that the increase in box-office prices after the VAT-raise cannot be the complete cause of the decreased demand for season 2011/12.

The rapport shows in simulations that demand to the VSCD-theaters was 2,1% lower than it would have been, had the VAT-rate been kept at 6%. This is based on the assumption that the VAT-raise was completely included in the box-office prices, therefore this outcome needs to be regarded a maximum (Blankers et al., 2012: 169).

Other factors that influence consumer behavior, besides the price of a product, are income and the prices of substitutes. Prices of substitutes have increased (Blankers et al., 2012: 89) and because this would ideally create an increase in demand for VVTP-productions, the prices of substitutes cannot be the cause of decreasing demand for VVTP-productions.

Income has an even stronger influence on demand for VVTP-productions than box-office prices do. The estimated figure for income elasticity of demand is 2,5. An increase in national consumer income of 1% will lead to an increase in demand for VVTP-productions of 2,5%. This figure of income elasticity of demand for VVTP-productions is higher than the figures found for theater halls, which lie between 0,52 and 2,01 (Blankers et al., 2012: 155). Purchasing power of consumers has decreased in 2011/12 with 0,3 % (CBS, 2012), which would therefore have caused a decrease in demand of 0,75%. This decrease is not significant. Apart from that, the purchasing power of consumers has been decreasing since 2008 (CBS, 2012). This change in purchasing power in 2011/12 can therefore not be the cause of the decrease in demand of 13,9 %.

Another specific factor for decreasing demand for VVTP-productions seems to be increasing supply of VVTP-members. Combining increasing supply and decreasing demand, means average attendance per performance has decreased even stronger (Blankers et al., 2012: 83,85).

Qualitative data

Although other factors play a role, the three producers stated that increasing VAT has ‘certainly not helped’, in other words: it did not stop or reverse the decreasing trend in demand.

The three producers find it hard or even impossible to analyze which part of the decrease can be contributed to the VAT-raise. Producer C said it is impossible to calculate how many people stayed away due to the VAT-raise. And ‘hits are above laws’, indicating the strong demand for popular performances regardless changes in box-office prices. The VAT-raise alone is not the cause of decreasing demand.

According to producer A it differs per genre what the effect of the VAT-raise could have had on demand. With comedy or entertainment (musical, international shows, etc.) it is different than with theater plays, because the reactions of consumers differ per genre. He expects musical and comedy audiences to pay more attention to price changes than audiences at theater plays.

Producer B does not think the decrease in demand that was noticed, is due to the increase in VAT. He says he is forced by theater managers to price tickets at € 25 for a very popular performance, whereas he is sure that if tickets would cost € 50 it would still be sold out (referring to the same characteristics of hits as producer C).

According to B decreasing demand is due to the economic crisis, and to changes in agendas of people that used to attend theater around 20 years ago. The theater sector has not innovated enough to capture the generation following this group of people, according to B.

Verified or falsified?

Although demand to commercial theater has decreased strongly in 2011/12, it is impossible to contribute this to the increased VAT. However, consumer income and prices of substitutes cannot be addressed as the cause either. Increased supply of VVTP-productions might have played a more important role in the decreasing demand for commercial theater. Although the VAT-raise has probably had a small negative influence on demand for commercial theater due to the slight increase in box-office prices, the fall in demand of 13,9% needs to be contributed

to other circumstances as (people's perception of) the economic crisis. This hypothesis is falsified.

3. Commercial theater producers experienced negative effects on income of increased VAT

Quantitative data

The average income per visit to the producer has decreased by 5,5% in season 2011/12 (Blankers et al., 2012: 179, 182). Also the part of revenue from box-office income in total income has decreased. In 08/09 income from ticket sales made up 95% of total financing, in 11/12 this part has decreased to 84%. Only a very small part (1%) comes from sponsoring and subsidy (Blankers et al., 2012: 87). The growing gap is referred to as 'other', referring to other ways of generating income as merchandizing, renting out room or equipment and maybe even loans.

The effects on income of an increase in box-office prices due to a VAT-raise differ from the effects of 'normal' price increases. With normal price increases a possible decrease in demand is compensated by an increase in income per visit. Whereas in the first case, box-office income decreases. If all of the VAT-raise is covered by the box-office prices, a fall in demand will cause a decrease in revenue to the producer. If only a part of the VAT-raise is covered by the box-office prices, income per visit to the producer decreases. This means that an increase in VAT will almost always cause a decrease in box-office income, which has negative effects on the income capacity of organizations (Blankers et al., 2012: 18).

The box-office income of nine VVTP-members¹¹ in season 10/11 was estimated at 94.338 million Euros, which was 86% of total income. In season 11/12 the share in income of box-office has decreased to 84% and is estimated at € 77.262 million Euros (Blankers, 2012: 182, 87). Using these figures the VAT that was paid per season by the VVTP-members can be estimated. In season 10/11 this was 6% out of 94.338 million Euros, which is € 5.660.280. In 11/12 19% had to be paid out of € 77.262 million Euros, which is € 14.679.780. Had the VAT-rate been kept at the lower level of 6%, the figure in the second case would have been € 4.635.720. The average amount of VAT paid (apart from effects of the VAT-raise that might have cause this amount of income to be lower than it would have been otherwise) of [(€ 14.679.780 - € 4.635.720) / 9 =] € 1.116.006 per producer. To use this data to estimate the loss in income per producer, data on VAT paid over material to produce (see chapter 2.2.4.) is

¹¹ Nine VVTP-members supplied useful data on income, eight members on number of performances

needed, because the difference between what is paid over hired or purchased material and the VAT paid by over revenue from box-office income is the result that is paid.

Qualitative data

Producer A agrees that the VAT-raise has affected income to his company negatively, but does not know by which percentage and he does not think this percentage to be very high. He contributes decreased income to the overall situation of the theater sector, which ‘runs badly’, the reduced popularity level of his productions produced in 11/12 and the overall economic crisis. Producer A: ‘we have definitely experienced a loss in income, but not much of that is due to the VAT-raise’. The impression of producer A that demand to his productions is not (very) price elastic and that most of the time theaters did agree with him to increase box-office prices by the full percentage of the VAT-raise and to remain at that price level after VAT had decreased again (see timeline chapter 2), makes him expect that income from ticket sales to his drama productions has *increased* with about 10%.

Producer B states the VAT-raise did play a role in decreasing income in season 11/12. He gives an example of a production that was staged before and in 10/11, as well as in 11/12. In 10/11 this production was still profitable, but in 11/12 it produced a financial loss. According to him, this is owing to the VAT-raise.

Producer C says it is impossible to calculate which percentage of decreased income is due to the VAT-raise, because it is impossible to calculate how many people stayed away due to the VAT-raise. ‘But’, he says, ‘for every person that did attend, more tax had to be paid’.

The producers list other factors to be more important for decreased income. The most important factor in this is the overall economic crisis, which had started already in 2008, so three years prior to the VAT-raise. But the effects of the economic crisis on sectors like culture are only getting clear, and researchable, now (Blankers et al., 2012: 7). The effects of the recession follow two paths: (1) due to a decline in consumer spending in the cultural sector, it becomes more difficult to receive and increase own income through (ticket) sales and (2) also a decrease is found in sponsoring and donations (Blankers et al., 2012: 21). Parallel to this, different local governments introduce large subsidy cuts due to the economic situation (Blankers et al., 2012: 7). These subsidy cuts might result in lower guarantee sums and higher supplement prices (these supplements often cover some costs for the building, which is mostly also subsidized). Producer A and B experience both these trends.

Verified or falsified?

Average income per visit and the percentage part of revenue from box-office income out of total income both decreased. All three producers agree that the VAT-raise affected their income negatively. Only when demand stays the same or increases and VAT is completely calculated into the box-office price, does an increase in VAT not have a negative effect on income of producers (and theaters). Set forth above: box-office prices have not increased enough to capture the VAT-raise and demand to commercial productions has decreased, therefore the VAT-raise does have a negative effect on income of commercial producers. This hypothesis is verified.

4. Employment at commercial producers has decreased due to the VAT-raise

Quantitative data

For season 2011/12, the number of employers as well as the number of fte's have decreased at both the office and the productions. The number of employers has decreased by 1,3% for that season and the number of fte's at commercial production companies by 9,1% (Blankers et al., 2012: 182).

As with the previous hypothesis on income, it is hard to analyze which part of this decrease in employment can be attributed to the VAT-raise. The factors that play a role in decreasing income at producers also influence employment, since a company's income directly influences its financial room for employment.

Qualitative data

Also on this point the producers differ in their impressions. Producer A disagreed with the statement that the VAT-raise negatively influenced employment at his office. Both fte's for productions as well as for the office have not been decreased at his company during season 2011/12.

But producer B agreed that employment at his company decreased during season 2011/12 and that this was partially due to the VAT-raise. The reason he gave for this is that the VAT-raise has kept commercial producers from producing large productions. He stated that it is hard to indicate the cause of negative effects, but when VAT increased things as employment changed for the worse at his company.

'During that period change appeared', he explains, 'especially in the part of the sector with higher box-office prices. Those larger productions with higher box-office prices, are not

produced as much as they were before 2011/12, because fewer theaters wanted to take the risk. Therefore, less people are working in the sector and fewer ad hoc employees are hired’.

At the office of producer B there had been a cut back of 25% in fte’s. ‘This is not completely due to the VAT-raise, but the VAT-raise did not help to prevent this’, he stated. More factors can be indicated, but the VAT-raise played a role in this. ‘The government thought it would not make a difference at the commercial producers, which are the entrepreneurs of the sector, but it did make a difference. Not for the very popular productions, but for the more vulnerable productions and nowadays everything seems to be vulnerable. Therefore, at the point of employment, I am sure it did have negative effects.’

Verified or falsified?

The secondary (quantitative) data from the rapport show that employment has slightly decreased at commercial producers during season 2011/12. Although producer B has experienced a strong negative trend in employment in or around season 2011/12, this cannot be contributed to the VAT-raise.

Employment is a result of income of companies. Therefore, in the theater sector developments in employment for one season will probably follow developments of income from the previous season. The effects on employment of the VAT-raise will then have appeared during season 2012/13. For this season there is no secondary data available, only the experiences of the interviewed producers. However, at the moment of interviewing, the experiences (still) differ.

The goal of this research is to investigate the short-term effects of the VAT-raise. On this short-term the effects of the VAT-raise on employment at commercial producers cannot be signaled. Still, regarding the negative effects this VAT-raise has had on income of commercial producers, it is expected that employment will suffer from this.

At this point in time, this hypothesis is falsified, with the remark that it might be verified if this trend is looked at in a year or more.

5. The intended raise in income to the Dutch government from VAT was not met during the first year.

Quantitative data

There is no strong evidence in the form of quantitative data showing the exact financial income to the government from the VAT-raise on the performing arts. However, although demand for productions of the VVTP-members has decreased for season 2011/12 and average

income per visit also decreased, testing hypothesis 3 showed that the difference between 6% and 19% for season 2011/12 over revenue from box-office income is € 10.044.060. This is the amount that these nine VVTP-members have lost in income due to the VAT-raise and that is ‘won by the government’.

These nine members approximately produce half of total VVTP-productions¹², so total loss in income due to the higher VAT-level for the VVTP will be around 20 million Euros.

In chapter 2 the size of the VVTP was estimated at 18,3% on the total performing arts market. If 20 million Euros make up for 18,3% of the total raise in income to the government from the VAT-raise, then this total raise is 103,3 million Euros, *ceteris paribus*.

For this calculation it is assumed that VAT paid on purchased or hired material has been the same in season 2010/11 as in 2011/12. What remains after the producer has balanced out VAT over bought or hired material with VAT over revenue from box-office income is the true benefit to the government. It can be assumed that VAT paid over hirer or bought material in 2010/11 is approximately the same as in 2011/12. However, what exactly these amounts are and which changes in demand for all other forms of performing arts have appeared, is unknown. Therefore this calculation ‘stops’ at this point, but it is unlikely that this balancing out would result in reclaiming 58 million Euros or more by suppliers on the purchase and consumption submarkets of the total performing arts market.

Another way of estimating the income to the government from the VAT increase is analyzing box-office income at the VSCD-theaters. When looking at figure 3 and 4, the theaters also balance out VAT that is paid over guarantee sums or revenue from box-office income to the producer, with VAT that is paid over box-office income *at* the theater. The income from VAT to the government is the result after both theater and producer have balanced out the VAT.

However, the VSCD supplies data per year not per season (see also chapter 2.2.2.) and the last year of the period for which data was gathered was 2011 (Blankers et al., 2012: 179). Only the months September until December of that year are included in season 2011/12. Box-office income has been decreasing since 2008. Therefore it would be too speculative to calculate paid VAT for season 2011/12 at the VSCD-theaters by simply using data from 2011. Besides the fact that also for the VSCD-theaters the amount of VAT paid over guarantee sums or revenue from box-office income that is handed over to the producers, is unknown.

¹² The number of members differs per theater season. Ape (Blankers et al., 2012) counts at one place seventeen, at another nineteen. At the VVTP-fair in February 2013 nineteen members were counted (see footnote 1)

Qualitative data

All three producers agreed to this hypothesis and stated they knew from the start that this measure would not reach the intended effects. Producer A states that when everything in the performing arts sector decreases, the number of productions, the fte's, income, demand, and so on, then income to the government will decrease in more sectors than just in the performing arts. Taxes on loan, other products, cafes and restaurants, everything decreases. Producer A thinks it possible that the hoped for effect of the VAT-raise to the government was eliminated by the drop out in all the other taxes.

The VAT-measure was, according to producer A, not a way to economize, but a purely political game to give Geert Wilders a measure to show his supporters that he 'had dealt with those artists'. Therefore this measure had never had the intention to truly yield anything. It was already a much governmentally discussed measure, so it was more a symbol for 'look at us, we are cutting back'.

Producer B is sure that the financial goal set by the government was not met. This measurement was according to producer B a contra productive one: 'The emotional effect has been large. The signal to the public that this measure provided was very negative. First, together with the subsidy cuts, this measure put culture in a very bad light. Second, at a time where people do not easily spend their money, this measure made people think that attending theater had become very expensive. The damage done by increasing VAT and cutting subsidy is much larger than the 48 million, respectively 200 million Euros, that the government sought to 'gain'.'

Producer C also states the measure was contra productive. According to him the decision to increase VAT on performing arts was purely sentimental. 'And very stupid, because it did effect the entrepreneurs the most.' Pure effects (monetary, measurable effects) were not the only effects. With that he refers to the emotional effect that was also named by producer B.

Verified or falsified?

The producers all think this measurement has not provided the financial income the government hoped for. However, the calculations with quantitative data show that this intended increase of 45 million Euros in income to the government from VAT might have been reached after all.

Although the share of the VVTP on the total performing arts market in The Netherlands is only estimated and paid VAT over products purchased or hired by the

producers and theaters is unknown, these calculations here lead to carefully assume that the goal set by the government is met and to falsifying this hypothesis.

8. CONCLUSIONS

The main research question was:

What were the short-term effects of VAT-raise on commercial theater producers in The Netherlands?

To analyze this a rapport written in 2010 formed the starting point (Goudriaan, 2010) . This rapport was written before VAT increased from 6% to 19% and forecasted a domino-effect: box-office prices would increase with 12,3 %, due to the price elastic character of commercial theater demand would fall with 13,5%, income would decrease accordingly, which would cause a decrease in employment and this all would have the effect that the government would not be able to increase income from VAT on the performing arts by the desired 45 million Euros.

It has been almost three years since this rapport was written and almost one year since the VAT-measure was reversed: VAT on performing arts has been in the higher rate from July 1st 2011 until July 1st 2012. Therefore at this date, the short-term effects can be evaluated.

First of all, box-office prices did increase, however not with the full percentage that was needed to cover the VAT-raise. What exactly consumers pay at the box-office for commercial theater is unknown since data at VVTP-members was gathered on average income per visit and the average box-office prices exclusive VAT at VSCD-theaters also explain the rest of VSCD theater supply. However, this second figure best reflects the changes in box-office price for the performing arts sector and with that for commercial theater producers. Including VAT an increase of 7,32% is noticed at the box-offices of VSCD-theaters. The interviewed commercial producers have experienced the contract negotiations with theaters on including VAT into box-office prices differently. This difference in experience leads to the conclusion that box-office prices have increased after the VAT-raise was implemented, but not with the full percentage that was needed to keep the VAT-raise from affecting average income per visit to the producer.

Also a decrease in demand for commercial productions has been noticed. It is impossible to calculate how many people stayed away after VAT was increased, but if the VAT-raise did affect demand for commercial theater, it must have been negatively. Although

both figures for PED that were found were based on average income per visit in relation to demand and are therefore not reliable to reflect consumer reactions at the box-offices, it can be expected that demand for theater in general and commercial theater in particular is sensitive to changes in box-office prices.

An increase in box-office price that is unable to capture the VAT-raise and a fall in demand inherently leads to a decrease in revenue from box-office income to the producer. What exactly the effect on producers' income was is impossible to calculate at this moment, because (as figure 2 and 3 in chapter 2 show) more factors influence revenue from box-office income to the commercial producer than consumer demand alone. But per visit more VAT had to be paid during season 2011/12 than during other seasons and box-office prices were not raised enough to capture this.

At this date of writing the effect of the VAT-raise on employment at commercial producers seems negligible. One producer has experienced a loss in employment, but which part of that can be contributed to the VAT-raise is unclear. At this point the overall economic crisis seems to play a bigger part. However, employment is sensitive to changes of a company's income and income to the commercial producers has decreased due to the VAT-raise. The effect on employment might therefore show later. But because VAT has been decreased to 6% again, it is more likely that commercial producers are able to intercept the effect this has on employment.

Last but not least, the income result to the government from the VAT-raise on performing arts was estimated. Due to a somewhat complicated tax system and the unavailability of data, the exact benefit to the government cannot be calculated. However, although demand for commercial theater decreased even more than was expected, the increase in VAT over box-office income in the 19%-situation compared to the 6%-situation seems to be enough to cover the 45 million Euros that were wanted from the performing arts sector.

Although the VAT-raise might have provided financial benefit to the government, the measure was luckily reversed one year after it was implemented. As seen above, the effects it has had limit commercial producers to increase revenue from box-office income by raising box-office prices. The measure has mainly had negative effects on income of commercial producers and these non-subsidized entrepreneurs need revenue from box-office income to keep producing theater at the same pace and to be defensible to the economic crisis.

The short-term effects on commercial theater producers of the VAT-raise were: an increase in box-office prices and a decrease in demand. The VAT-raise influenced contract

negotiations, which shows the importance of contracts in the theater sector. In contracts box-office prices, supplements and the division of box-office income are determined.

Apart from this the VAT-raise caused a lot of hassle and irritation. The commercial producers did not understand the decisions that were made by the government, experienced this as an additional way to harm the performing arts sector, consider the media attention that this measure gathered to be harming the image of and demand for theater and had to discuss with theaters on including this VAT-raise in box-office prices or not, which caused unnecessary discussion. However, the VAT-raise probably provided the only positive effect the government attended: an increase in income from VAT on performing arts of 45 million Euros.

FURTHER RESEARCH

Apart from monitoring the performing arts sector more intensively, calculating a figure for PED that reflects consumer reactions to changes in box-office prices and gathering more different data, some more proposals for further research can be done after writing this master thesis.

First of all, the effects of the VAT-*decrease* should be analyzed. All three producers noted the VAT-*decrease* for season 2011/12 as also having negative effects on them and maybe even more than the VAT-raise. The discussion on box-office prices continued when VAT was lowered to 6% again in 2012 (see figure 5). According to producer B, the VAT-decrease following the VAT-raise resulted in a lower level of box-office prices for season 12/13 than for 10/11. In that way the VAT-raise had an indirect decreasing effect on box-office prices. When VAT decreased, every theater wanted to decrease box-office prices with the full 13%, producer B stated. This meant that box-office prices in some cases ended up lower than they started before the VAT-raise. When the increase had not been completely calculated into the box-office prices, but the decrease was, this caused a decline in box-office price. Also some public attention was drawn to which theater lowered its box-office prices and which did not, which sometimes forced theaters to do so (or at least to pretend).

Another remarkable finding is found when comparing the trend in average income per visit to the producer and the trend in box-office prices at the theaters. The first one decreased, whereas the second increased. If all other circumstances stayed the same, then (according to figure 3 and 4) the trends in these figures should follow the same path. This indicates a change in contracts between theaters and producers. The share in revenue from box-office income to the producer has declined. This could be due to a smaller part of the producer in the division of box-office income and/or an increase in supplements on tickets. Both these trends, but especially the second one is noticed by the three commercial producers and myself. On the purchase market the position of theaters apparently have gotten stronger and the positions of producers have weakened.

BIBLIOGRAPHY

Begg, D., Fischer, S. & Dornbusch, R. 2008. *Economics 9th edition*. London etc: McGraw-Hill Education (UK) Limited.

Blankers, I., Goudriaan, R., De Groot, N., Everhardt, T., Frierson, R. & Mazzola, G. 2012. *Effecten van de economische crisis in de cultuursector*. Den Haag: Aarts De Jong Wilms Goudriaan Public Economics bv (*Ape*).

Broek, A. van den, Haan, J. de & Huysmans, F. 2009. *Cultuurbewonderaars en cultuurbeoefenaars: Trends in cultuurparticipatie en mediagebruik*. Den Haag: Sociaal en Cultureel Planbureau (SCP-publicatie 2009/8).

Ganzeboom, H., Maas, I. & Verhoeff, R. 1990. *Podiumkunsten & Publiek*. Rijswijk: Ministerie van Welzijn, Volksgezondheid en Cultuur.

Gilbert, N. (ed.) 2008. *Researching social life*. Los Angeles etc.: Sage.

Goudriaan, R., Groot, N. de, Notenboom, A., Schrijvershof, C. & Hout, C. van, 2008. *Evaluatie van het verlaagde btw-tarief cultuur en media*. Den Haag: Aarts De Jong Wilms Goudriaan Public Economics bv (*Ape*).

Goudriaan, R. 2010. *Effecten van de btw-verhoging bij de vrije theaterproducenten*. Den Haag: Aarts De Jong Wilms Goudriaan Public Economics bv (*Ape*).

Groot, N. de. 2007. *Increasing the price of theater, a modern tragedy?*. Amsterdam: University of Amsterdam.

Kleingeld, E. 2011. *Podia 2010*. Amsterdam: VSCD.

Kleingeld, E. 2012. *Podia 2011*. Amsterdam: VSCD.

Langeveld, C. 2009. *Zaken van Zalen*. Amsterdam: Boekmanstudies.

Plasterk, R.H.A. & Jager, J.C. de. *Kabinetsreactie evaluatie verlaagd btw-tarief cultuur en media*. Den Haag: Ministerie OCW en Ministerie Financiën.

Rechtbank 's-Gravenhage, 389722/ HA ZA 11-829 (LJN.BQ8751); d.d.22-06-2011

Seaman, B. 2005. *Attendance and Public Participation in the Performing Arts: A Review of the Empirical Literature*. Atlanta: Andrew Young School of Policy Studies, GSU.

Throsby, D. 2001. *Economics and Culture*. Cambridge: Cambridge University Press.

TK (2001/2002)

Belastingplan 2002. Tweede Kamer, vergaderjaar 2001/2002. 28015, memorie van toelichting, onderdeel C.6.

TK (2010/2011)

Belastingplan 2011. Tweede Kamer, vergaderjaar 2010/2011. Wet van 23 december 2010, Stb. 2010, 872, *V-N 2011/5.3.2*.

TK (2010/2011)

Tweede Kamer, vergaderjaar 2010/2011. Kamerstukken I 2010/11, 32 504, nr. D, 32 505, 32 401, *V-N 2010/67.2*.

TK (2010/2011)

Belastingplan 2011. Tweede Kamer, vergaderjaar 2010/2011. *Meer dan kwaliteit, een nieuwe visie op cultuurbeleid*.

TK (2011/2012)

Begrotingsakkoord 2013. Tweede Kamer, vergaderjaar 2011/2012. *Advies Raad van State Wet uitwerking fiscale maatregelen Begrotingsakkoord 2013*

Towse, R. 2010. *A Textbook of Cultural Economics*. Cambridge: Cambridge University Press.

Vries, K.G. de, Niekerk, N.C.M. van. 1997. *Heroriëntatie arbobeleid en Arbowet*. Den Haag: Sociaal Economische raad.

Websites

www.cbs.nl

www.ser.nl

www.vvtp.nl

APPENDICES

Appendix A: Demand elasticities

Appendix B: Interview schedule

Appendix C: interview A

Appendix D: interview B

Appendix E: interview C

Appendix F: Summary in Dutch (*samenvatting*)

APPENDIX A

DEMAND ELASTICITIES

A.1. Introduction

To be able to describe hypotheses about the influence of changes in price, income and prices of related goods, different numbers for elasticity of demand can be calculated.

If all other things are kept equal, the demand curve, which shows the relation between box-office price and quantity demanded, is a straight line (see figure A). Next to the (own) price elasticity, there are two other forms of demand elasticities: income elasticity and cross-price elasticity (Begg et al, 2008, p.56).

This appendix chapter will outline, more in detail than in chapter 3, how price elasticity of demand, income elasticity of demand and cross-price elasticity is calculated and give an overview on what has been found on these topics for demand for theater.

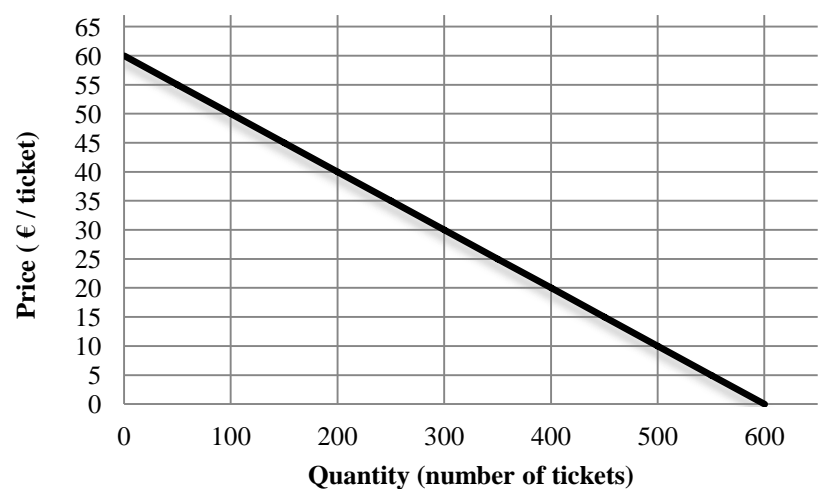
A.2. Price elasticity of demand

When estimating price elasticity of demand, changes in consumer income and changes in prices of substitutes are taken into account, since only then the effects of changes in box-office prices can be isolated. The value of the figure of price elasticity of demand also depends on the level of analyses: sector (macro level) or organization (micro level) (Blankers et al., 2012: 132).

Figure A is used to explain the calculation of price elasticity of demand. As stated above, the slope of the demand curve (and whether it is a straight line or curved), depends on the characteristics of a good, its price elasticity included (Begg et al., 2008: 55).

PED is an abbreviation for price elasticity of demand, also referred to as demand elasticity (Begg et al., 2008: 56).

Figure A: Demand for theatre tickets



Definition of PED by Begg et al., page 56:

The price elasticity of demand (PED) is the percentage change in the quantity demanded divided by the corresponding percentage change in its price.

$$\text{PED} = (\% \text{ change in quantity}) / (\% \text{ change in price}).$$

Using the model above, the demand curve used as an example in chapter A.1. leads to table A, where for every decrease by 10 euros in box-office price and its corresponding increase in quantity of tickets demanded, the figure for PED is calculated.

Table A: Calculating price elasticity of demand

Price (€ / ticket)	Tickets demanded	PED
60	0	$-\infty$
50	100	-6
40	200	-5
30	300	-2
20	400	-1
10	500	-0,5
0	600	0

In this case demand falls when prices rise, so the figure for PED is preceded by a minus sign. For most goods demand curves slope down, therefore their changes in price and changes in quantity have opposite signs and demand elasticity is a negative number. But the minus sign is often left out, because nearly all goods have a negative PED number (Begg et al., 2008: 56).

The first figure for PED in table A is ‘minus infinity’, because the percentage change in quantity from 0 to 100 would be $100/0$ and any positive number divided by zero is infinity (Begg et al., 2008: 57).

As shown in table A demand elasticity falls when we move down the demand curve. At higher prices a higher PED is found and at lower prices PED turns to small and even decreases to zero when the price per ticket is changed from € 10 to zero. This is also true for (almost all) curved demand schedules. For linear demand schedules, it does not matter whether PED is calculated using price increases or decreases. For nonlinear demand schedules, down sloping curves, the change in quantity demanded differs per price change, which is resolved by calculating PED for very small changes in price as the curvature negligible (Begg et al., 2008: 58).

From the height of the PED grade it can be read out whether demand for an investigated good or service is elastic, inelastic or unit-elastic. If the figure exceeds -1 demand is elastic (Begg et al., 2008: 58). In the previous example demand is elastic for prices between € 30 and € 60. This means that increases in price within this range will lead to a decrease in demand (the higher the starting price, the higher the PED so the bigger the decrease in quantity demanded).

Demand is inelastic when PED lies between 0 and -1 (Begg et al., 2008: 58). In the previous example demand is inelastic at € 10 or € 0 euros. At these prices a 'normal' rise will lead to a negligible change in demand.

At $PED = -1$ demand is unit-elastic (Begg et al., 2008: 58). At this point total spending of consumers is unchanged when prices rise or fall. Total spending is the price times the demanded quantity, e.g. how much is spend by consumers at a certain price. Beginning at high prices and moving down along a demand curve, total spending will first increase and then decrease. At the turning point, demand is unit-elastic. Total spending rises at points where PED is elastic and prices are cut or at points where PED is inelastic and prices are raised. And total spending falls when PED is elastic an prices are raised or when PED is inelastic and prices are cut. But at the point where demand is unit-elastic, it means that the raise or cut in price leads to an equal rise or fall in the demanded quantity and therefore in total spending. E.g.: the rise or fall in quantity demanded compensates for the change in price (Begg et al., 2008: 61). For example: when the price of the tickets for the performance in the example rises from € 20 to € 21, PED remains -1.

Although PED differs per price on demand schedules for goods, statements can be made about whether elasticity of demand for a good is high or low, because most goods have a 'normal' price, a price that is usually charged (Begg et al., 2008:58).

PED is of demand elasticities used the most (Begg et al., 2008: 56), but two other demand elasticities play a role here: income elasticity of demand and cross-price elasticity of demand. In the following subsections of this chapter, the ways in which to calculate these other two are set forth.

Knowledge of PED for commercial theater in particular is limited, since former research had analyzed this for either just subsidized theater or for commercial and subsidized theater together (Goudriaan, 2010: 6).

Estimation of PED

The lower VAT-rate influenced demand for theater, also when the theater halls or producers did not include this benefit into the box-office prices. In that case box-office prices did not have to be raised to compensate for increased costs. The expectations were that this measure prevented a decrease in demand (Goudriaan et al., 2008: 71). To be able to calculate to what extent the lower VAT-rate prevented an increase in box-office prices and with that a decrease in demand, the figure for PED was estimated (Goudriaan, 2008: 71).

A.3. Income elasticity of demand

Income is one of the variables influencing consumer behavior and its relationship to the quantity demanded is positive. The figure of income elasticity of demand expresses the change in quantity demanded due to the change in consumer income (Towse, 2010, p.148).

To calculate the figure for income elasticity of demand, the percentage change in quantity needs to be divided by the percentage change in income (Begg et al., 2008: 65)

The income elasticity of demand for theater tickets will be useful when determining other effects than the increased VAT-rate over this theater season.

A.4. Cross-price elasticity of demand

When calculating the own price elasticity of a good, all other factors are remained constant, only the changes in price of the examined good is changed. When calculating the cross-price elasticity of demand, the own price of the examined good remains constant and elasticity is calculated for price changes in *other* goods. When a rise in price of good A increases the quantity of good B demanded, cross-price elasticity is positive. In general this is the case when good A is a substitute for good B. When goods A and B are complements, then usually their cross-price elasticity figure will be negative (Begg et al., 2008: 64).

Although in this research neither the effects of price changes for substitutes of theater on the demand for theater tickets, nor the effects of increased box-office prices on the demand for substitutes of theater are discussed, it is useful to address this cross-price elasticity of demand. This model explains that when for example movie tickets are supposed to be a substitute for theater tickets, it is likely that part of the audience will substitute away from theater when prices of theater tickets have increased.

To estimate and explain price and income elasticity of demand for cultural activities, the determinants that are used to purely calculate them are not enough, since changes in demand are not just caused by changes in box-office prices or consumer income. That is the function of consumer theory: to explain the underlying relationships(Blankers et al., 2012: 129).

A.5. Conclusion

A figure for price elasticity of demand for theater tickets is needed to calculate the possible change in demand when prices increase. This figure is found through dividing the percentage change in quantity demanded by the percentage change in price.

To find out whether demand for theater tickets is income elastic during theater season 10/11 and 11/12, the percentage change in quantity demanded had to be divided by the percentage change in consumer income for these two years.

Prices of substitution goods, like movies, stayed the same after the VAT had been raised for theater tickets. Consumers might have substituted away from (commercial) theater to substitutional goods as movies. However, in this research focus laid on the effects on commercial producers. If VAT had caused a decrease in demand, it was irrelevant whether the ‘dropped consumers’ turned to substitutional entertainment goods.

APPENDIX B

Interview schedule

First, I explained the art of research and that the companies as well as the producers themselves would stay anonymous. Then the three producers were confronted with the information from the 2012-Ape rapport conclusion on the situation of VVTP-members:

In this chapter we set forth the developments of the supply, number of attendances, attendance fees, financing mix and the recruitment power of the VVTP-members in seasons 2005/2006 through to 2011/2012. To do so, data of nine VVTP-members that have provided data for that whole period have been used.

Supply of the VVTP-members has increased between 2005 and 2011, both in number of performances as well as number of productions. However, the number of attendances has decreased significantly: with 18% over the whole period, which is an average of 4,4% per year.

Decreasing number of attendances can be the result of higher entrance fees. However, this is definitely not the case with the VVTP-members. The 'ticket price' has decreased with 18% between 2005 and 2011 (an average of 3,3% per year), while the price of substitutes (competing leisure time activities) has increased with 23% (an average increase of 3,4% per year).

This indicates that the VVTP-members have been hit relatively hard by the economic crisis. Commercial theater producers lower entrance fees, but in the meanwhile experience a decrease in demand. However, this does not seem to lead to anticipation in supply.

Then I explained that I am looking for the role of VAT in this story. So that I am looking for (1) the differences on a few factors between season 10/11 and 11/12 and (2) the effects of season 11/12.

Box-office prices

In 2010 it was forecasted that the box-office prices would increase due to the VAT-raise with the complete percentage increase (13%).

Did you take the VAT-raise into account when setting box-office prices with theater managers?

Which contract form is used most? Have buy-out contracts been used?

Which construction did you conceptualize?

1. Take the VAT-raise for own account
2. Calculate parts of the VAT-raise into the box-office prices
3. Calculate the complete VAT-raise into the box-office prices
4. Calculate the VAT-raise into the box-office prices via a stepwise construction that eventually captures the complete percentage? Within which period?

Demand for theater

It was forecasted that demand for commercial theater would decrease.

Which role in this do you consider to be for the VAT-raise?

Is it your impression that theaters became more careful when 'buying' productions?

What is the role of the VAT-raise in this?

Do you think that box-office prices for movies and other substitutes influence demand for theater?

What is the role of the VAT-raise in this?

Income

It was forecasted that the VAT-raise would cause a decrease in demand.

Is the turnover at your company for season 11/12 more, less or the same as turnover in 10/11?

In case of a decreased income, which part is due to the VAT-raise?

Employment

It was predicted that the decrease in income would cause a decrease in employment.

Did you reduce the number of fte's at your office in 2012 compared to 2011?

Did you reduce the number of fte's at the productions in 2012 compared to 2011?

Which part in this is contributed to the VAT-raise?

Financial outcome

It was predicted that this measure would not produce the hoped for 45 million Euros for the government.

Do you think this VAT-raise produced the financial outcome that was hoped for?

APPENDIX C: Interview A

Box-office prices

At the time when box-office prices were set for 11/12 it was already clear that VAT would be raised. We tried to include the VAT-raise in the box-office prices as much as possible, but sometimes it wasn't. Most of the theaters did want to include the VAT-raise into the box-office prices, but if say after that a the price of a ticket at the box-office would end up at € 30,50, we would decide to stay at € 29,50, for psychological reasons. In that case it would not be completely calculated into the box-office price. Or if box-office prices already were extremely high at a theater... Well, there are always arguments to decide not to include a raise in VAT in box-office prices, but in principle we calculated the full VAT-raise into the box-office prices and that is what most theaters also wanted.

The increase in box-office prices for season 11/12 compared to season 10/11, is completely due to the VAT-increase.

The most used form of contract is split with guarantee sum. Buy-out contracts are hardly used anymore, except for some productions in small halls, but that is a different price category, which therefore causes not much difference.

A stepwise construction (stepwise calculating the VAT-raise into the box-office prices) was never an option. Box-office prices were relatively low at that time in The Netherlands and income from productions were minimal. Which provided the argument that, if we would not include this VAT-raise in the box-office prices, we would end up earning even less per ticket than was already the case.

Demand for theater

Overall the theater sector is in a difficult time, but how difficult depends on the segment and we have not had much problems, because our demand for our productions is not very price elastic. And it depends on other factors as the popularity of a production. Also demand had been decreasing already, so obviously it did not help to increase box-office prices, but in our case the negative effects were not very much present.

I think one solution to decreasing demand is price differentiation. In order to be able to capture all consumers, many different tickets in different price categories need to be offered.

At the box-offices demand is lower, so theaters are more conscious when buying in, they pay less and buy less, but this is not due to the VAT-increase. This trend is still present, even though VAT has been lowered again.

Income

The turnover at my company for season 11/12 is less than turnover in 10/11, but I have no idea what the exact lost amount would be. Overall season 11/12 was more negative than 10/11. Two of our productions in that season were ‘flops’, which had never happened in 30 years before. Demand for them was extremely low. But that is not caused by the VAT-raise, so that clouds the results of that season. However, my idea is: we did not experience much trouble of that VAT-increase. Surely income has decreased during that season, but not so much and it is more due to the economic recession and popularity of our productions than to the VAT-increase.

In the end, I even think we came out stronger, because when VAT was lowered again after season 11/12, not all box-office prices were lowered accordingly. So we actually had been able to increase box-office income.

Employment

Both the number of fte’s at the office as well as at the productions were not lowered in 2012 compared to 2011. Maybe even on the contrary, but the number of fte’s has definitely not decreased.

Financial outcome to the government

The VAT-increase has not delivered financially what the government hoped for. I think the VVTP has figures that proves this.

Not only did ticket sales not raise enough income from VAT to the government, also decreases in fte’s and in number of productions results in less income to the government from more than box-offices. Wage tax, tax on drinks at the cafés on the corner, everywhere less tax is paid. Due to this it can be assumed that the possible positive effect of the VAT-increase is eliminated by the decreases in taxes that used to be paid in times before the VAT-increase.

The intended 45 million Euros were calculated before the measurement was implemented and were not a measure of economy. It was a political game, played by Geert Wilders, so he could show his supporters that he had dealt with those artists. Even at the government this measurement was cause of discussion even before it was implemented and questions were raised whether it would even result in any positive financial effects.

APPENDIX D: Interview B

Box-office prices

Box-office prices have not decreased, but the share of the producer in box-office income has decreased.

There is no theater that was willing to calculate the VAT-increase completely into the box-office prices. They all feared decrease in demand. In the segment of higher box-office prices the VAT-raise was not completely calculated into the box-office prices.

Especially in the segment of higher box-office prices, theaters were not willing to stepwise include the VAT-increase. However, when VAT was decreased, box-office prices were all lowered by the full percentage, which resulted in a decrease in box-office prices in the end.

Split with guarantee sum is the most used contract form, we hardly use buy-out anymore.

Demand for theater

I don't think demand for theater decreased due to the VAT-increase. It is partly due to the overall economic crisis, but there is another form of crisis going on. Interest in theater decreased, because the group that always occupied all seats in the theaters has become less mobile, active and able to purchase, for many reasons. The generation that comes after these people, has never formed the habit of going to the theater.

The theater sector has not been active enough to renew itself. There is no constant flood of consumers anymore. The generation that attends theater now, likes to go to Soldaat van Oranje and Mars&Venus (two theater hits around 2012 in The Netherlands red.). Theaters force me to price tickets at the box-office at € 25 for a big hit. Why? If box-office prices were set at € 50, it would still be sold out. To capture most visitors and most box-office income, price differentiation should be used.

Theaters pay lower guarantee sums due to the decreased demand. They need to focus and realize they are unable to stage 6 productions a week.

Income

Income at this company has decreased due to the VAT-increase. This is due to the fact that more tax has to be paid. There is one production for which we always made profit and during 11/12 we experienced a loss in come. Purely due to the VAT.

Employment

The number of fte's as productions has been reduced, because the largest productions were not produced anymore due to the VAT-increase. It is hard to say what the share of the VAT-increase is in this trend, but it is definitely not to say that everything staid the same after VAT was increased. Trends turned for the negative, especially in the higher price categories, musical and international show.

At the office the amount of fte's has been cut back by 25%. All I can say is that the VAT-increase did not prevent this to happen. It was thought that it did not make a difference if VAT was increased, but it did matter, especially for the more vulnerable part of the market.

Financial outcome to the government

I am sure this measurement did not result in what the government hoped for. I don't know what the financial result was, but the measurement has been contra productive. We should not underestimate the emotional effect of this. The signal to the public was very negative, because it put culture in a bad light, together with the subsidy cuts. In a time where everybody watches their expenses, people have also started to think going to the theater is expensive. We cannot beat that. The national cut backs have also started a trend in cutting back on cultural subsidy on all kinds of governmental levels.

APPENDIX E: Interview C

Box-office prices

The discussion on including the VAT-raise into the box-office prices differs per form of contract. The most used form of contract is split with guarantee sum. Buy-out is hardly used.

At the time when box-office prices were negotiated on for 11/12, it was known that VAT would be raised.

Whether or not the VAT-raise was calculated into the box-office prices differed per theater and per production. This is caused by the differences in attitudes of theater managers: some wanted to sign a signal to the audience saying ‘we think about your money’ (e.g. not include VAT-raise in box-office prices), other theaters wanted to show they spared the producers (e.g. include VAT-raise in box-office prices).

Demand for theater

It is impossible to calculate how many people stayed away due to the VAT-raise. And ‘hits are above laws’, indicating the strong demand for popular performances regardless changes in box-office prices. The VAT-raise alone is not the cause of decreasing demand.

Income

It is impossible to calculate which percentage of decreased income is due to the VAT-raise, because it is impossible to calculate how many people stayed away due to the VAT-raise. But for every person that did attend, more tax had to be paid obviously, so that caused a loss in income from box-office sales.

Employment

Also on this point it is impossible to say which part in these trends can be contributed to the VAT-increase.

Financial outcome to the government

The measure was contra productive. The decision to increase VAT on performing arts was purely sentimental and very stupid, because it did effect the entrepreneurs the most. Pure effects (monetary, measurable effects) were not the only effects. With that he refers to the emotional effect that was also named by producer B.

APPENDIX F: Summary in Dutch

SAMENVATTING

In 2010 ontstond in de Nederlandse theatersector veel ophef na het aankondigen van het voornemen om per 1 juli 2011 de btw (belasting over de toegevoegde waarde) op podiumkunsten van 6% naar 19% te verhogen. Verwacht werd dat deze maatregel meer kwaad dan goed zou doen. Dit onderzoek is gericht op het beantwoorden van de vraag welke effecten deze maatregel uiteindelijk heeft gehad voor vrije theaterproducenten.

In de titel wordt daarnaast de vraag gesteld wie er ‘gelijk’ heeft gehad: de Nederlandse overheid, die bij de berekening van de verhoogde inkomsten uit btw op podiumkunsten mogelijke vraaguitval achterwege liet, of *Ape*¹³, het onderzoeksbureau dat in 2010 onderzocht dat deze maatregel teleurstellend uit zou pakken door het sterke prijselastische karakter van theater.

Deze scriptie bestaat uit drie delen. Het eerste deel bevat het theoretisch kader betreffende de podiumkunstenmarkt, de btw en consumentengedrag. Allereerst worden opbouw, specifieke eigenschappen, contracten, prijzen en prijsvorming van de podiumkunstensector beschreven, gevolgd door een beschrijving van de rol van de btw op podiumkunsten in Nederland in de laatste decennia. Tot slot legt de meer algemene economische theorie van consumentengedrag in combinatie met de hiervoor genoemde onderwerpen, een basis voor onderzoek en uitleg van de mogelijke werking van veranderingen in de btw. De markt van de podiumkunsten kan worden onderverdeeld in twee afzonderlijke markten: de inkoop- en de afzetmarkt. Zodoende zijn er ook twee soorten kopers: (1) de theaters die voorstellingen inkopen bij de producenten en de bezoekers (2), die kaartjes kopen voor de voorstellingen aan de kassa van het theater. Btw wordt betaald door beide kopers, zodoende heeft een verandering in btw dan ook effect op beide markten. Veranderingen in btw hebben invloed op prijs, vraag en het inkomen van de verkoper (in dit geval: de producent). Op welke manier een btw-verhoging effect heeft op de vrije theaterproducent, is afhankelijk van de gekozen contractvorm en de reactie van consumenten op veranderingen in prijs (de mate van prijselasticiteit).

¹³ Aarts De Jong Wilms Goudriaan Public Economics bv (*Ape*)

Het gedrag van de consument komt tot uitdrukking in de vraagcurve. De vorm van de curve, en dus het gedrag van de consument, wordt beïnvloed door smaak, inkomen en prijs van substituten. In het geval van culturele goederen, wordt de vraag daarnaast nog beïnvloed door factoren als tijd en culturele vorming, wat wordt uitgelegd in het model voor cultuurparticipatie. Dit hoofdstuk over consumentengedrag laat tevens zien hoe cijfers voor prijs- en inkomenselasticiteit tot stand komen.

Het theoretisch kader wordt afgesloten met een uiteenzetting van het onderzoek van *Ape* (Goudriaan, 2010) naar de effecten van de btw-verhoging op vrije theaterproducenten. Hieruit blijkt dat aan de theaterkassa een prijsstijging van 12,3% verwacht werd, na een btw-verhoging van 13%. Gegeven de, in dit onderzoek bepaalde, relatief sterke mate van prijselasticiteit van theater, zou een dergelijke prijsstijging leiden tot een afname in vraag van 13,5%. Het inkomen van de producenten daalt dan ook met dit percentage, wat een afname in werkuren en uitgaven in andere economische sectoren tot gevolg zou hebben. Uiteindelijk zou deze maatregel de overheid 20% minder inkomen uit btw op podiumkunsten opleveren dan de 45 miljoen waar ze op hoopte.

De in dit onderzoek beschreven verwachte effecten, vormen het uitgangspunt voor de hypothesen in deze scriptie, onderbouwd met de rest van het theoretisch deel.

Zodoende zijn de volgende vijf hypothesen tot stand gekomen:

1. Kaartprijzen van vrije theaterproducties zijn gedaald na de btw-verhoging
2. Vraag voor vrije theaterproducties is gedaald als gevolg van de btw-verhoging
3. De btw-verhoging heeft negatief effect gehad op het inkomen van vrije theaterproducenten
4. De btw-verhoging heeft negatief effect gehad op de werkgelegenheid bij vrije theaterproducenten
5. De verwachte verhoging van de opbrengst uit btw op de podiumkunstsector is in het eerste jaar niet behaald

Methode en data

In november 2012 verscheen een rapport over de effecten van de economische crisis op de culturele sectoren (Blankers et al., 2012). Dit onderzoek vormt een rijke bron kwantitatieve data om de hierboven genoemde hypothesen te toetsen. Daarnaast zijn deze hypothesen voorgelegd aan drie vrije theaterproducenten, die gevraagd zijn hun ervaringen en meningen hierbij uit te leggen.

Resultaten

Bij het toetsen van de hypothesen in dit onderzoek is gebleken dat de kaartprijzen niet met het volledige percentage zijn gestegen, wat betekent dat de prijsstijging onvoldoende was om de btw-verhoging op te vangen. De afname in vraag kan niet volledig aan de btw-verhoging worden toegeschreven, aangezien is gebleken dat deze daling reeds enige tijd ervoor was ingezet en de gevonden cijfers voor prijselasticiteit van (commercieel) theater onbruikbaar zijn, aangezien bij de berekening het gemiddelde inkomen per bezoek is meegenomen in plaats van de daadwerkelijke prijs aan de kassa.

De btw-verhoging heeft negatief effect gehad op het inkomen van de vrije theaterproducenten, aangezien de kaartprijzen onvoldoende zijn gestegen om de btw-verhoging op te vangen en de producenten dit dan ook met het eigen inkomen hebben moeten doen. Hoewel werkgelegenheid het patroon van het inkomen van een organisatie meestal volgt, is er onvoldoende tijd verstreken sinds de invoering van de btw-verhoging en is deze maatregel te kort van kracht geweest, om te kunnen aantonen dat er sprake is van een negatief effect.

Tot slot blijkt uit dit onderzoek dat de overheid de verhoging van het inkomen uit btw op de podiumkunstsector niet heeft overschat.

Conclusie

Twee effecten van de btw-verhoging kunnen op deze korte termijn worden vastgesteld: een prijsstijging aan de kassa en een daling in het inkomen van de producent. De daling in vraag was reeds voor de btw-verhoging ingezet en een daling in werkgelegenheid kan nog niet worden vastgesteld. De daling in vraag is niet zodanig sterk dat het de verhoging van inkomsten uit btw op de podiumkunsten voor de overheid, uitvlakt. Berekeningen in dit onderzoek tonen aan dat de overheid ‘gelijk heeft gehad’.