

# **Presenting and producing performing arts in the light of cost efficiency; juxtaposing the Netherlands against Germany.**

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## **Keywords**

cultural economics, performing arts, cost efficiency, producing and presenting.

## **Summary**

Just as any other industry, the performing arts realize an output due to a certain input. Nonetheless, the characteristics of the industry, being non-profit and receiving subsidy, have an influence on the way the input is constituted. Whereas in the for profit sector, organizations aim to maximize profit by increasing the output and minimizing the production costs, the aim is different for the performing arts. Nonetheless, times have changed, and in economical harsh time it has also become important for cultural institutions to bring about a healthy balance between the productions costs of their input and the output realized.

In this article, the performing art landscapes of the Netherlands and Germany are compared, because they differ significantly in the way they produce and present theatre. In Germany performing companies and venues form one organization while in the Netherlands these are separate organizations. Generally is presumed that the German system of presenting and producing is preferable for the social embedding of the arts and support for cultural subsidies. The data suggests that the separated production and presenting of the performing arts in the Netherlands works more cost efficient than the German system. The Netherlands attracts the same number of visitors with less seats and performances available. Also, the subsidy requirement is lower and the degree of occupancy is higher.

## **Introduction**

Just like other sectors, the daily business of the performing arts is challenged by the economic crisis. As a result of this, theatre companies and venues are looking at other options and across borders for alternative ways of running their businesses. This is also the case in the Netherlands. Here the business of producing and that of presenting theatre is usually separated. This is contrary to the landscape of performing arts in Germany. Here the process of producing and presenting is generally combined. Both of these systems have their own characteristics with advantages and disadvantages. In an economic situation where subsidies are not only declining in number, but also in size and the number of visitors is decreasing (VSCD, 2011), it is interesting to look more closely at these two options to find out which one is more likely to help the theatre business survive in economical harsh times without artistic quality declining.

Firstly the paper discusses former literature on production costs, presenting and producing theatres, followed by an overview of the advantages and the disadvantages of these two systems. Out of the theory a definition of cost efficiency is selected, so that it becomes possible to test which of the two case studies is actually more cost efficient. Subsequently, the methodology of this particular comparison between the Netherlands and Germany is explained after which the specific results are discussed. Finally this leads to the conclusions and the discussion for future research.

This research looks at the economical difference in input and output of two performing art systems. Former research has been focussed on the necessary output to reach economies of scales. But no practical research has been done to compare two systems of producing and presenting performing arts in order to find out which of the two works more cost efficient. Also, the lack of data has long been the reason why models designed for the purpose of determining demand relationships, cost relationships and behaviour of non-profit institutions have been hampered (Lange et al, 1985).

## **Literature review**

### *Production costs – Cost efficiency*

Artistic creations, thus also the performing arts, have characteristics that correspond to the development of products in other industries (Taalas, 2003). To begin with, a performance or a piece of art needs to be created. Then this artistic creation needs to be produced: it becomes a theatre- or dance production, an opera or a concert. Following this a piece has to be distributed and finally it has to be performed for an audience: the presentation. The economic side of production processes can be expressed by production functions for the performing arts (*i.e.* Gray, 1992; Taalas, 1997; Zieba & Newman, 2007). Related to production one could state that there needs to be an input in order to realize a desirable output. The input variables should reflect those services that make the production process possible. Labour (artists) and capital (rehearsal spaces) are the most common input variables (Gapinsky, 1980). Other input variables affect the output levels, while hardly comprising an essential or indispensable part of the production process. Examples of these are box office or maintenance personnel (1980). Output of the performing arts is mostly measured in the artistic quality, the number of performances and the size of the audience.

Since culture is a service industry, Gapinsky states that the output measure should reflect the importance of the consumer in productive activity (1980). The artist cannot produce output without an audience; the performance of a dance group needs to be watched in order to be output, otherwise it is more like a rehearsal. Thus it seems logical to take the number of cultural experiences, measured by attendance, as the output of artists (1980). Globerman speaks of the basic output as the individual live performances of a performing arts group (Globerman, 1974). Lange expresses total costs as dependent on the output, measured by the number of performances, and the costs of factor inputs: labour and capital (Lange et al., 1985).

The performing arts differ from other industries in that it is usually non-profit. This issue needs to be considered, because the lack of a motive for profit implies that the usually mandatory marginal conditions

might be irrelevant for the performing arts (Gapinsky, 1980). In order to express the maximum possible profit, the equality of marginal products and input prices are usually expressed relative to the price of the output (1980). Thus, the maximum profit of a performance is realized when one more performance costs the same as the income from the visitors paying for their attendance. However, as said this is usually not the way performing companies think and behave.

Gapinsky's research points out that the performing arts all have an input configuration that is different from profit maximization. The fact that cultural institutions do not aim to maximize profit and because they receive subsidy, their ability or willingness to minimize costs is different, and not seldom less, from other industries. Nonetheless, in economical harsh times, it is important for cultural institutions to realize a healthy balance between the productions costs of their input and the output realized. As previously reported this research looks at the different characteristics of presenting and producing theatres versus presenting theatres and producing performing companies. The following two sections discuss former research on this topic and the specific characteristics with their advantages and disadvantages.

#### *Characteristics of presenting and producing theatres*

As mentioned before, when it comes to *production* and *presentation* in the performing arts industry, there are two main options of running the business. In the first option the organization combines production and presentation, in the second these processes are separated. The former option implies that companies have their own performance stage for which they produce their work. Travelling to other theatres is kept to a minimum. The latter entails a structure in which theatres have the freedom to program guest performances, such as shows and concerts of autonomous companies. In this structure performing companies have separated rehearsal spaces with or without a small stage for presentation. Theatres and concert halls invite the performing companies for a performance or hire out the theatre to these companies.

Globerman (1974) makes a distinction between *main* and *other performances*, as well as *home* and *tour performances*. A *main performance* needs the full utilization of the organizations performing artists. *Other performances* include presentations in the form of workshops, ensemble performances or children's matinees by groups of artists. Since labour costs are the most expensive costs for the performing arts organizations, the greater the percentage of main performances in total, the greater the overall production costs are (1974). Another factor that affects the costs is the location of the performances. In Globerman's research the operating costs will be lower for tour performances if the travel costs are lower than the costs that are saved by the organization that is hiring them. In the travelling scenario, the performing arts group usually receives a flat fee, while the hiring organization pays for the operating expenses (advertising, service personnel etc.). In the case of a home performance, these operation costs are paid by the group itself, but at the same time the total income of revenues is also for the group (1974).

For producing theatres the input is a high degree of labour (artists) and a low degree of capital (rehearsal space, scenery, props), while for the presenting theatres the input is just some labour and a high degree of capital (venue), mainly aimed at making the visiting performance possible (facilities, marketing and technique).

Besides the input, there are other features that can be considered when comparing the two options of presenting and producing venues. One might wonder in which occasion a theatre functions on a higher artistic level and whether the performing arts industry is better served when the responsibilities lie with one organization or when a performing company and a theatre each have their own responsibilities? It could be that a certain tension between the theatre and the company improves the performance of both organizations, while on the other hand it can cause (financial) inefficiency.

*The performing arts landscape – two options.*

As described in the previous section, the performing arts landscape can be divided into two options. Naturally, both of these have their advantages and disadvantages. One of the great advantages of the producing theatre is that these theatres usually have a strong connection with their environment and will adjust the performances accordingly. Because of this it is possible to have an intensive relationship with the audience and stakeholders, resulting in a clear artistic identity (Krebs & Pommerehne, 1995). Because of the close connection, the audience forms a personal relationship with the actors, because they identify with the theatre and the actors they see each time they visit the theatre (Bouder-Pailler, 1999). When the producing is separated from the presenting of art (as in the Netherlands), the art is too little connected to the social lives of people to be of great value (Maanen, 2010). Therefore producing theatres are more likely to have a stronger (social) embedding. This has consequences for the way marketing is used: a logical consequence of the above is that producing theatres recruit their audience from a smaller area and often for more than one performance.

The advantage of presenting over producing is that the financial risk of the production can be shared among two parties: the performing company on the one hand and the venue on the other. Also, there exist economies of scale. Fazioli & Filipinni (1997) underline this by stating that already produced shows should be presented more frequently in different theatres. Globerman (1974) states that encouraging touring by medium sized theatre groups is more cost efficient than subsidizing the development of new local groups. Also, the opportunity to travel around reduces the need for art groups to constantly renew their performances. The existence of significant economies of scale suggests an opportunity for policy makers to moderate cost increases and increases in income gaps in the performing arts (1974).

Another downside of producing theatres is that the audience is often presented with the same company and does not have a chance to meet new ways of performing, directing and actors. Also, the programming can be diverse, but never as diverse as that of the presenting theatre. So on the one hand producing theatres have a first-hand influence on what they offer but on the other hand the composition of their ensembles affects the decision possibilities about a seasons' repertoire. This is because the set composition limits the selection of plays that can be produced (Boerner, 2011).

The advantage of the one system is the disadvantage of the other: the producing theatres carry a greater financial risk (Fazioli & Filipinni, 1997). A producing theatre carries the risk for both producing and presenting. But also, when the theatre is used for rehearsing there are fewer days left for performances with an audience;

the result is that the number of shows performed in these types of theatres is less than in theatres that book touring performances. This results in fewer opportunities to create income.

Nonetheless, Last & Wetzel (2011) pointed out the possibility of increasing returns to scale for producing theatres: cooperation among theatres in the form of additional external performances improves, according to them, the scale of operation and reduce the relative costs of stage design and rehearsal.

But just as the costs of production are substantial, the costs of travelling can be as well. The decor and the technique has to be build up and taken down for each performance. This costs money and time. And as the geographical distance between theatres becomes greater, travelling might not lead to efficiency gains, but rather to efficiency losses from relatively high transportation costs (2011). Also, travelling limits the possibilities for the décor and other techniques. Finally, the marketing demands a different approach (Röper, 2001). When travelling, the audience needs to be found in a larger area, oftentimes for one performance only.

## **Methodology**

### ***The case studies***

As there are substantial differences between the two options of producing and presenting theatre, it makes it interesting to compare the two on their cost efficiency. This leads to the main question of this research:

*Does the system of combined production and presentation of performing arts lead to more cost efficiency than the system of separated production and presentation?*

In order to answer the question this research makes the comparison between the Netherlands and Germany. In contrast to the fact that these two neighbouring countries have comparable economic, social and cultural systems the former works mostly with presenting theatres, while the latter works with the combined way of producing and presenting performing arts.

Politically, the Netherlands has a system in which the national government is responsible for the *production* of shows. Municipalities have the responsibility for the *venues* presenting the performances and concerts. Performing companies and venues are separated organizations with their own financial and artistic responsibility. The government supports the performing companies financially; municipalities establish and support the venues. In the Netherlands a number of performing art groups receive direct subsidy from the national government, they belong to the so-called *basic infrastructure* (Ministry of Education, Culture and Science, 2009).

In Germany the performing arts landscape looks rather different. It has the so called 'Produzierende Theater' which have their own companies, usually opera, drama or dance. Theatres that present some or all of these forms are called 'Mehrspartentheater' and they can house a company for each genre. In the bigger cities Germany has specialised theatres like the 'Schauspieltheater' which present mostly drama. Finally, like the Netherlands Germany has the 'Gastspieltheater', a theatre that does not house its own company and which

books performances that have been produced by others. Nonetheless, these are outnumbered in comparison to the 'Produzierende Theater' and because of that not included in this research. In Germany most of the large cities have theatres with departments for producing performing arts (Röper, 2001).

### ***The sample***

The sample of this research is based on information of the theatres of eight cities in the Netherlands and eight cities in Germany (see Appendix 1). The Dutch sample includes eight theatres and the performing companies from the same area that belong to the basic infrastructure (subsidized by the government). These eight cities provide an extensive supply of subsidized performing arts and are spread around the country. Each of the cities has a performing company and in most cases an active theatre and a drama and/or dance academy. The cities are mostly capitals of the provinces and belong to the largest cities of the country. All together they have 2,7 million inhabitants.

The German sample includes eight theatres that produce their own performances. We looked at German cities of the same size, spread over the country and fulfilling a similar position as their Dutch counterparts as the capital of a province. Also, these cities possess a similar extensive infrastructure of performing arts supply. Hamburg, Berlin and Munich have not been looked at because these cities have no comparable counterparts in the Netherlands when considering the number of inhabitants. The partaking German cities, like those considered in the Netherlands, also have a combined population of 2,7 million inhabitants.

### ***The data collection***

The data on performing art companies in the Netherlands is gathered by the Ministry of Education, Culture and Science and by the Theatre Analysis System (TAS) of the Society of Theatre and Concert Hall Managers (VSCD). The data concerning venues is directly collected from the involved halls.<sup>iii</sup> In Germany the data is gathered by the Deutscher Bühnenverein (2009).

This research looks at four different groups of aspects in the comparison between the Netherlands and Germany. Firstly the number of halls, seats and visitors, the subsidies received, the programming and finally the degree of occupancy. These four groups are shortly discussed to explain their influence on the cost efficiency of the system.

#### ***Number of halls, seats and visitors***

It is interesting to look at the number of halls and seats, because this explains the capacity available. Also, as mentioned in the literature review, the usual measures of output in the performing arts are quality and the number of performances. Also the size of the audience is important as an artist cannot produce a real output without an audience. Globerman (1974) uses attendance per tour performance as a measure of orchestra quality.

#### ***Subsidies***

The input and output of an organization are also related to whether it is an organizations aim to make profit. Also, the fact that it receives subsidy or not and to what degree, influences the way a business is run. As Spann states, state agencies often review the pricing and output decisions of certain organizations, such as cultural organizations. The organizations need to produce a certain (number) of output or are not allowed to rise prices above a certain price. It is argued that regulation causes situations in which input is used in proportions that do not cause cost-minimization. Specifically, it pays for the organization to be more capital-intensive at any level than it would be to minimize costs (Spann, 1974). Thus in analysing the necessity to be cost efficient it will be interesting to look at the subsidies received in both Germany and the Netherlands.

### *Programming*

In relation to production costs, but also to subsidy, it is necessary to look more closely at the programming of the Dutch versus the German system. Different genres imply large differences in production costs. Opera for example is a lot more expensive to realize than a dance performance. Also, the availability and degree of subsidy can also cause the choice for cultural institutions to produce more expensive genres in the programming.

### *Occupancy*

As the literature suggests, the costs of capital plays a role in the production costs (input) of the performing arts and thus also in the comparison of venues in the Netherlands and Germany. When analysing which system works more cost efficient, it becomes interesting to look at how intensely the theatre as a capital good is used. In order to do this one looks at the degree of occupancy.

### ***Data analysis***

Some related aspects need to be considered in advance. The one municipality charges all establishing and maintenance costs to the exploitation of the halls, the other municipality pays for a part of the investment costs à fonds perdu, which means the capital costs paid by the venue are lower. We assume that these differences apply both in Germany and in the Netherlands.

Also, one could wonder why the research does not look at the revenues. These are higher in the Netherlands than in Germany, but one must realize that this is because the venues and the companies are separate entities. There are payments between the both back and forward: venues pay companies for their performances, and companies pay venues rent for presenting performances or share their profit. This results in that the aggregated revenues and costs for venues and companies in the Netherlands are higher compared to the German theatres where the costs of the performances are internal costs. This is interesting for the national income in the Netherlands but it clouds the comparison to Germany. For this reason the revenues of the Dutch and the German venues and performing companies are not taken into account.

#### *1. Number of halls, seats and visitors*

In the Netherlands both the theatres and the performing companies count the number of visitors. This can lead to double counting in the research. In the analyses this data has been corrected: the audience attracted by subsidized companies in the examined cities are deducted from the number of visitors in the theatres in those cities.

## 2. *Subsidies*

As explained in the previous paragraph on data collection, the availability of subsidy (and the related influences by government bodies) can influence the willingness and necessity to minimize costs. Also, to be able to analyse the subsidy requirement, the programming of both countries needs to be made comparable. Germany has a lot more opera in its programming than the Netherlands and the subsidy requirement depends on *how* the performances are produced. There are various options: firstly the opera can be guest performances of foreign performing companies, secondly an opera company temporarily hires what it needs to produce a specific repertoire and thirdly the company (such as the 'Nederlandse Opera') operates like a German opera company with their own hall. In the Netherlands all options occur and provide a range instead of a set number of subsidy requirements by the Netherlands in comparison to Germany.

## 3. *Programming*

The theatres in Germany mostly have their own orchestras which are used for opera and ballet. These orchestras sometimes have their own concerts in the theatre. This could mean a saving of funds compared to the Dutch system, because in the Netherlands a hall has to book a guest orchestra for concerts while German theatres can make use of their own orchestra. Analyses of the programming of the German theatres in this study shows that a narrowing of the research considering this aspect does not lead to an essential difference in the results, because the German public theatres in the research do not present so many concerts in their venues.

In the Netherlands opera companies don't have their own orchestras. Each production requires collaboration with a guest orchestra that receives its own subsidies from different authorities.<sup>iv</sup> In the total costs of the Dutch opera companies the subsidies to these guest orchestras are added. These subsidies run up to a 100.000 euro per concert in 2008, in this case per performance.<sup>v</sup>

## 4. *Occupancy*

In order to analyse how intensely the venues as a capital good are used, hereafter the research looks at occupancy. The number of visitors per seat, the number of performances per hall and the seats per hall are taken into account.



## Results

### *Number of halls, seats and visitors*

According to table 1, the venues in the Netherlands have 55% less stages than the German venues (24 versus 53). The capacity per venue is comparable (on average 443 versus 477 seats) so the total number of seats in the Netherlands is also less than half of the total number of seats in Germany (10.646 in the Netherlands, 23.712 in Germany). The total number of performances performed in the theatres and by the performing companies in this study in the Netherlands is 5.591 – which is 12% lower than in Germany (6.229). Thus, as the capacity is much lower in the Netherlands than in Germany, the number of performances is proportionally less small. It is remarkable that the performances in the Netherlands attract, despite the lower number of seats and a smaller number of performances, almost the same number of visitors (2.1 versus 2.2 million).

**Table 1: Data theatres and performing companies 2008<sup>vi</sup>**

	Halls 2008	Companies 2005/2008	Netherlands 2008	Germany 2007	Germany /Netherlands
inhabitants			2.754.865	2.694.372	
halls	16	8	24	53	
seats	6.566	4.080	10.646	23.712	
seats per hall			443	447	
performances total		2.688	5.591	6.229	
visitors total	1.271.009	844.403	2.115.413	2.177.822	
own revenues x €	32.214.651	26.011.148	58.225.799	36.525.000	
total subsidy x €	36.410.170	96.039.360	132.449.530	250.710.000	
total costs x €	63.484.177	106.166.450	169.650.627	320.303.000	
subsidy/total costs	57%	90%	78%	78%	
subsidy/performance x €	12.543	35.725	23.689	40.268	170%
subsidy/visitor x €	29	114	63	122	194%
subsidy/inhabitant x €	13	35	48	93	194%

### *Subsidies*

The German cities in this research contribute 143 million euro to the researched performing companies including venues; a considerably larger sum than the 55 million euro of the Dutch cities. The total amount of subsidies from the State, the provinces and the cities in Germany (251 million euro) is 190% of the subsidies in the Netherlands (132 million euro). German performances receive 70% more subsidy per performance (40.268 versus 23.689 euro). Per visitor, German performances receive 94% more subsidies – almost twice as much (122 versus 63 euro). Also, the subsidy per inhabitant in the compared cities is 94% higher in Germany than in the Netherlands (93 versus 48 euro).

### *Programming*

The Theater Analyse System and the data from the Deutsche Bühnenverein (see table 2) show that the German halls in this study offer more music and less dance and drama. Within the genres there is a difference in the number of shows and the number of produced titles. Producing theatres often have the same title on the programme several times, presenting theatres book more often a show for one night. A sample shows that the participating Dutch theatres present 25 percent more variation in titles than their German colleagues (see Appendix II).<sup>vii</sup> The audience can experience a larger variety in the programming.

**Table 2: Programming 2007/2008<sup>viii</sup>**

2007/2008	Netherlands		Germany		Refined			
Shows	theatre -/ own companies	company	Total	Total	Total	Total		
Music theatre/opera/opera/operetta	348	145	493	9%	1.159	19%	1.382	22%
Dance/ballet	290	645	935	17%	320	5%	380	6%
Musical	174		174	3%	191	3%	228	4%
Drama	1162	1.898	3.060	55%	2.583	41%	3.080	49%
Family/children			0	0%	1.005	16%	0	0%
Music	261		261	5%	295	5%	352	6%
Other	667		667	12%	365	6%	435	7%
Guest performances of third parties			Not applicable	0%	311	5%	371	6%
Total	2904	2.688	5.591	100%	6.229	100%	6.229	100%

The collective name 'music theatre' contains genres such as opera and operetta. In Germany this genre almost entirely consists of opera and operetta. In the Netherlands it also entails theatre concerts in which the music is performed in a theatrical setting. This is noteworthy, because the costs of the different genres can vary extensively. The costs for opera – due to soloists, orchestras and often a choir – are disproportionately high. Dutch statistics (Ministerie van Onderwijs, Cultuur en Wetenschap, 2010) show that a performance of the Nederlandse Opera in the period of 2005-2008, including accompaniment by an orchestra, requires 335.000 euro of subsidies on average per performance, while performances of for instance the Toneelgroep Amsterdam require 18.000 euro on average and a modern dance performance in this same period takes 19.000 euro on average.<sup>ix</sup>

As already mentioned above, the programming of both countries needs to be made comparable in order to analyse the subsidy requirement. The German theatres present 6.229 performances, the Dutch theatres 5.591; a difference of 638 performances. The German theatres present 1.159 opera and operetta performances, the Dutch theatres 493; a difference of 666 performances. Furthermore, the Dutch statistics express no separate category for family/children and guest performances (this is inherent to the system). However in both of the countries theatres offer special programs for children within the various genres. It means that including opera for children the German theatres offer even more than 1.159 opera performances. When the performances for family/children are spread evenly among the different genres, the German theatres offer 229 opera

performances more than the mentioned 1.159. This taken together result in 1.382 opera performances in the involved German theatres, which is 889 more than in the Dutch theatres. See table 2.

To compare the German and Dutch subsidy requirements we analysed the subsidy requirement in the Netherlands when 889 additional opera performances would be presented. The required subsidy depends on the way opera is produced. Guest performances by East European companies need about 2.000 euro subsidy for the venue and generally none for the performance.<sup>x</sup> Opera performances produced by one of the touring opera companies in the Netherlands need 130.000 euro subsidy per performance in the period 2005/2008.<sup>xi</sup> Considering these two options, the subsidy requirement per additional opera performance varies between 2.000 and 130.000 euro in the Netherlands. For 889 additional opera performances 1,8 mln or 116 mln euro extra subsidy would be required. When the additional opera performances are produced by Dutch opera companies the required subsidy for all genres in the Netherlands would be  $132 + 116 = 248$  mln euro versus 251 mln euro subsidy in Germany. Thus, the required amount of subsidy in that scenario would be almost the same. The total number of performances in the Netherlands would increase from 5.591 to 6.480 ( $5.591 + 889$ ) compared to the 6.229 performances in Germany. Thus even with the same number of opera performances and the same subsidy the Dutch system still seems to be slightly more efficient.

One might wonder *why* Germany has a lot more opera performances than the Netherlands. In the research the performances in Germany attract 615 visitors per performance on average, versus 960 in the Netherlands.<sup>xii</sup> German theatres often put the same opera on the programme several times. Taalas (2003) pointed on the considerable costs of organizing, directing, rehearsing, and providing scenery and costumes for a performing art production. These are fixed costs and unrelated to the number of performances and audience size. It seems like the programming of the same opera performances in Germany is done because of the high costs of setting up an opera production for just an one-nightstand and because the German performances hardly travel. Another explanation could be subsidy. The availability of subsidy can be a reason to produce more performances for minor interests or with relatively high production costs, in this case opera performances (Austin-Smith, 1980).

### Quality

Looking for possible reasons to explain the economic differences between the Dutch and the German system one could think of differences in quality. Do the performances in Germany have a higher quality and can it explain the higher costs? We don't think so. The most outstanding companies in Germany are based in Berlin and in Munich. Here we think for instance of the Müncher Kammerspiele, the Deutsche Oper Berlin and the Bayerische Staatsoper. These cities and these companies were not involved in the research. However, the most outstanding Dutch companies like the Nederlandse Opera, Toneelgroep Amsterdam, Het Nationale Ballet and Nederlands Danstheater were involved. Outstanding companies work with the best soloists and directors, outstanding theatre and dance companies meet each other on international festivals and can be compared with each other. Below these companies it's difficult to compare. While the outstanding German companies

were not, and the outstanding Dutch companies were part of the research we may not conclude that the quality of the involved German performances is higher than the involved Dutch performances.

### Occupancy

When analysing how intensely the theatre as a capital good is used, a large difference between Germany and the Netherlands can be perceived. Because in the Netherlands theatre halls are hardly used for the rehearsals of companies, more shows can be booked each year. In 2007-2008 the theatres in the Netherlands used their halls 173 times and each seat was filled 158 times. In the same period the German halls were used 117 times and each seat was filled 87 times. Because capital costs are largely dependent on the number of halls and the seat capacity per hall, it can be concluded that the theatre as a capital good is more efficiently used in the Netherlands than it is in Germany.

**Table 4: Occupancy and hall capacity<sup>xiii</sup>**

2007/2008	Netherlands	Germany	Germany/Netherlands
Visitors per seat	158	87	55%
Performances per hall	173	117	68%
Seats per hall	444	447	101%

### Conclusion

In eight comparable cities in Germany and the Netherlands the financial difference between separated and combined production and presentation of the performing arts is researched. The Dutch theatres present a more varied programme and use their halls more intensely than the German theatres. The subsidiary requirements in Germany are larger than in the Netherlands as the theatres in the eight German cities receive 90 percent more subsidy (251 versus 132 million euro) than the Dutch theatres and companies in comparable cities. The costs per performance (circa 40.000 versus 24.000 euro), per visitor (122 versus 63 euro) and per inhabitant (93 versus 48 euro) are higher in Germany than in the Netherlands. In the Netherlands a lower amount of subsidy reaches an equal number of visitors. Nonetheless, the total number of performances is fewer and there might be less social embedding of the performing arts in the Netherlands.

The programming in Germany largely consists of the relatively expensive opera genre. When we consider the costs in the Netherlands for a comparable number of opera performances, the Dutch system would require almost the same amount of subsidy as the German system, provided that opera would be produced by Dutch touring companies. But is this relevant? The number of opera performances in Germany appears to be supply driven and not demand driven. This seems to be the result of the system of presenting performances in one place and not touring around.

As the Dutch theatres attract the same number of visitors as the German theatres with a lower subsidy requirement per performance, this paper shows that the Dutch system of separated producing and presenting

is more cost efficient than the German system of combined producing and presenting. Because of the cultural, social and economic similarities between Germany and the Netherlands it's plausible that the difference in the need of subsidy is highly dependent on the way the production of the performing arts is organized.

## **Discussion**

Policy makers in other countries could consider adopting a separated system of producing and presenting in their very countries. But to implement a touring system depends also on the geographical environment. This difference between Germany and the Netherlands has not been taken into consideration. The size of both countries differs substantially. The Netherlands has a travelling system, but in general it is not far for performing companies to travel to another city. In Germany these distances are much larger. Thus even though the German system seems less cost efficient, the difference in geographical distances could be the reason not to adopt a separated system of producing and presenting performing arts in a large and/or scattered country. However, when a region or country wants to develop a cultural policy the significant differences in subsidy requirements, programming, occupancy and probable social embedding of the performing arts makes it worthwhile to consider carefully the optimal system for a specific area and situation.

## Appendix I

Netherlands <sup>xiv</sup>	inhabitants	Halls/companies	Germany	inhabitants	Halls/companies
Amsterdam	747.093	Stadsschouwburg Amsterdam Toneelgroep Amsterdam Nationale Ballet Nederlandse Opera	Frankfurt	659.021	Städtischen Bühnen
			Saarbrücken	176.452	Saarländisches Staatstheater
			Dresden	507.513	Sächsische Staatsoper Staatsschauspielhaus
Groningen	182.484	Stadsschouwburg Groningen Noord Nederlands Toneel Noord Nederlandse Dansgroep	Bremen	547.769	Staatsoperette Bremer Theater
			Mannheim	309.795	Nationaltheater
Den Haag	475.681	Koninklijke Schouwburg Nationaal Toneel Nederlands Danstheater	Kiel	236.902	Bühnen der Landeshauptstadt Kiel
			Koblenz	106.087	Theater der Stadt Koblenz
			Potsdam	150.833	Hans Otto Theater
Rotterdam	582.951	Rotterdamse Schouwburg Scapino RO-theater			
Utrecht	294.737	Stadsschouwburg Utrecht Toneelgroep Utrecht			
Eindhoven	210.333	Parktheater Eindhoven Het Zuidelijk Toneel			
Maastricht	118.004	Theater aan 't Vrijthof Opera Zuid Toneelgroep Maastricht			
Arnhem	143.582	Schouwburg Arnhem Oostpool Introdans			
	<hr/>			<hr/>	
	2.754.865			2.694.372	

## Appendix II

Performances October 2010 <sup>xv</sup>			Theatres Germany		
Theatres Netherlands	performances	titles		performances	titles
Stadsschouwburg Amsterdam	31	15	Städtischen Bühnen Frankfurt	25	13
Stadsschouwburg Groningen	18	7	Saarländisches Staatstheater Saarbrücken	14	6
Koninklijke Schouwburg Den Haag	40	12	Sächsische Staatsoper Dresden	32	13
Rotterdamse Schouwburg	41	16	Bremer Theater	43	15
Stadsschouwburg Utrecht	33	23	Nationaltheater Bühnen der Landeshauptstadt Mannheim	7	7
Parktheater Eindhoven	23	18	Theater Kiel	43	15
Theater aan 't Vrijthof Maastricht	13	13	Theater der Stadt Koblenz*	31	9
Schouwburg Arnhem	27	20	Hans Otto Theater Potsdam	37	21
	<hr/>	<hr/>		<hr/>	<hr/>
	226	124		232	99

\* September 2010

## Appendix III Data theatres and companies 2008<sup>xvi</sup>

	Halls 2008	Companies 2005/2008	Netherlands 2008	Germany 2007
Inhabitants			2.754.865	2.694.372
Halls	16	8	24	53

Seats	6.566	4.080	10.646		23.712	
seats per hall			443		447	
performances home stage	2.903	1.246	4.149		5.998	
performances total		2.688	5.591		6.229	
visitors home theatre	1.271.009	409.647	1.680.656		2.053.783	
visitors total	1.271.009	844.403	2.115.413		2.177.822	
own revenues x €	32.214.651	26.011.148	58.225.799		36.525.000	
subsidy x €						
- country/state	62.857	69.981.027	70.043.884	53%	104.810.000	42%
- municipality	35.325.398	19.613.846	54.939.244	41%	142.930.000	57%
- other	8.000	6.444.487	6.452.487	5%	2.970.000	1%
- total subsidy	36.410.170	96.039.360	132.449.530	100%	250.710.000	100%
total costs x €	63.484.177	106.166.450	169.650.627		320.303.000	
wages x €	20.194.447	76.478.344	96.672.791		247.205.000	
wages/total costs	32%	72%	57%		77%	
subsidy/total costs	57%	90%	78%		78%	
subsidy/performance x €	12.543	35.725	23.689		40.268	66%
subsidy/visitor x €	29	114	63		122	194%
subsidy/inhabitant x €	13	35	48		93	94%

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<sup>iii</sup> The data of the Ministry of Education, Culture and Science concerns averages over the period of 2005-2008. The data from the Theater Analysesysteem concerns 2008. The data of the Dutch halls concerns 2008. The financial records from Germany concern 2007 and the statistical data from the 2007-2008 season.

<sup>iv</sup> De Nederlandse Opera collaborated in 2008 with the Nederlands Philharmonisch Orkest/Nederlands Kamerorkest, the Residentie Orkest, and the Rotterdams Philharmonisch Orkest. Opera Zuid collaborated with the Limburgs Symfonieorkest and the Brabants Orkest.

<sup>v</sup> Kunst in cijfers (2010): 70-71.

<sup>vi</sup> Source: figures theatres from survey halls and the Theatre Analysesysteem (2009), companies Netherlands 2005-2008 from Ministerie Cultuur en Wetenschappen (2010), Germany 2007 from Deutscher Bühnverein (2009).

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<sup>vii</sup> The websites of all participating theatres were studied and the number of shows for October 2010 was counted.

<sup>viii</sup> Source: figures theatres from survey halls and the Theatre Analysesysteem (2009), companies Netherlands 2005-2008 from Ministerie Cultuur en Wetenschappen (2010), Germany 2007 from Deutscher Bühnverein (2009).

<sup>ix</sup> Kunst in cijfers (2010): 64-65.

<sup>x</sup> Source: Administration Chassé Theater Breda 2008. The cost of an average opera performance from a Eastern European performing company presented in 2008 in the Netherlands was circa 20.000 euro. The performances are subsidised in the country of origin and can be produced at low costs. With 800 visitors times 30 euro, the revenue is enough to cover expenses such as buying out- and marketing costs. Besides the purchase and marketing expenses there are venue-related variable costs such as energy, cleaning and technical staff. We have set these costs at 2.000 euro per performance. Capital costs are not taken into consideration because these are part of the subsidies for the building. Costs venue: annual report Chassé Theater Breda 2008.

<sup>xi</sup> We researched the data of the professional Dutch opera company Opera Zuid. Their subsidy requirement in the period of 2005/2008 was 49.000 euro per performance. For the orchestra 79.000 euro needs to be added, totalling to circa 128.000 euro per performance. For the venue 2.000 euro is added. We did not take the Nederlandse Opera into account. This company has an own venue and operates like a German performing company.

<sup>xii</sup> Germany: 713.213 visitors for 1.159 performances in 2007-2008. Source: Theaterstatistik 2007/2008. In the Netherlands 476 opera performances on a yearly basis attracted 457,058 visitors in the period between 2005-2008. Source: Kunst in Cijfers: pag. 69. The comparison considers the participating cities in Germany and the subsidised opera companies in the Netherlands. Because of this the numbers should be seen as indicating.

<sup>xiii</sup> Source: figures halls Netherlands 2007/2008 from survey halls, Germany 2007 from Deutscher Bühnverein (2009).

<sup>xiv</sup> Source: Netherlands: Centraal Bureau Statistiek (2010), Germany 2007 from Deutscher Bühnverein (2009):10-35.

<sup>xv</sup> Source: Theatres Netherlands from website survey halls, Germany from Deutscher Bühnverein (2009).

<sup>xvi</sup> Source: figures halls 2008 from survey halls, companies Netherlands 2005-2008 from Ministerie Cultuur en Wetenschappen (2010), Germany 2007 from Deutscher Bühnverein (2009).