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The Efficiency Rumor:

Are US-American Opera Houses rightly said to operate more efficient than Germans?

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Economic Analysis and Comparison of Twelve German and American Opera Houses

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Abstract

Financial sustainability and artistic viability are becoming more of an existential question for performing arts organizations (PAO) as the ongoing global financial crisis and a changing fiscal environment exerts increasing pressure. The German cultural sector in general is said to have a dark future on the long run since their operations, especially in the performing arts sector, seem to remain too inefficient and resistant for change.

The purpose of this paper is to investigate if German opera institutions might take an example on US-American PAOs who are said to operate in a more entrepreneurial manner. It will be tried to establish internationally comparable parameters to indicate a PAOs efficiency by focusing on opera institutions in Germany and the USA. Eventually, their revenue structure, earnings gaps and wages-over-sales-ratios will be compared and discussed in detail. Moreover the paper will give a prospect of which further investigations would be needed to discuss this question in greater detail.

Keywords: cultural economics, opera, arts management, performing arts organizations, artistic viability

1. Introduction

Whenever debate about cultural institutions - especially classical music performance organizations and their future - occurs, the discussion includes the negative prospects faced by the sector. Most institutions in the 'developed' countries though are still able to survive, although the circumstances for institutions differ significantly from country to country. However, the requirements to create a good opera performance remain transnational.

Recent German publications draw a dark picture for the whole cultural sector and dare to ask the question of whether the current system of handling the high arts should be continued. (e.g. Haselbach et al. 2012) Within this context one of the most common suggestions is whether and how German institutions shall become more efficient. Common notion is that publicly owned cultural institutions would often have a highly inefficient operating process. Shining examples are said to be US-American institutions as they are supposed to have solved many problems related to the stiff German supporting system.

The underlying term 'efficiency' sets parameters to measure successful management of assets and operating processes. For performing arts organizations (PAOs) in general and opera houses in special though, defining the term 'efficiency' is slightly more complicated in comparison to for-profit entities as they live in a constant conflict between profitability and artistic aspiration. This makes it very difficult to find financial data to evaluate them.

Therefore, the purpose of this work is to try to give an answer to the question, whether US-American performing arts institutions (PAO) are rightly said to be more efficient within their operating processes than their German counterparts on an empirical basis. In exploring this question comparable parameters will be filtered first to being able to give an indication for 'efficiency' of a PAO. After that twelve opera houses in Germany and the US will be compared on an economic basis by focusing on the earnings gap and the wages-over-sales-ratio. Two main results will be drawn: First, it will show how German opera houses, although they have to handle a less efficient operating process as to be shown, reach a higher artistic viability. Second, it will address several gaps in academic background and studies available needed to be able to answer the emerged hypothesis more accurately.

It is important to have a look at the valuation framework first to see how the country's societies appreciate high art differently as this influences the political framework, supply and demand and other environmental factors.

2. Study Design

The underlying empirical basis consists out of an analysis of balance sheets and income statements from 2006 till 2010 of twelve opera institutions in Germany and the USA, six houses in both countries. These are: Chicago, Houston, San Francisco, Seattle, Washington and Pittsburgh in the US and Bremen, Düsseldorf, Essen, Frankfurt, Hamburg and Hannover in Germany.

Several requirements must have been fulfilled for being considered to optimize comparability. First, the German houses needed to be a Limited Liability Company (LLC) since all their US counterparts are LLCs. Other existing legal forms cannot be considered due to accountancy reasons (see chapter 4). Second, the houses must have a position as monopolists in their areas to ensure their independence in questions of price settings etc. For this reason, houses in e.g. Boston or Berlin, where two smaller or even three big operas are located, could not be taken into consideration. Third, the houses must be of a certain size. This includes having an own stage and thus the opportunity to not work in the stagione system entirely (see chapter 4).

For sure, every opera house is unique and has its own long grown structures that often do not relate to each other. For that reason the requirements mentioned above cannot ensure comparability completely of course. Therefore, again, it is important to keep in mind that the purpose of this paper is not to generate any fiscal theory for German institutions. It wants to give an indication whether the efficiency rumor is correct and which data basis must be collected to investigate this question in greater detail.

3. The societies differing valuation for arts - where does it come from and what does it lead to?

'Cultural Value' describes "the commonly held standards of what is acceptable or unacceptable, important or unimportant (...) etc. in a community or society." (Business Dictionary 2011) These standards are shared by the societies members and therefore create a personal value and internal reference in every individual. This value in consequence generates behavior. To understand why differences in handling cultural affairs appear it is important to see how value of cultural goods is considered differently between Germany and the USA.

Germany has a long history of supporting opera what causes German states and local governments to keep them highly subsidized until today. Furthermore, the actual achievements in arts and culture are seen as a national heritage. This causes the government and taxpayers to look at opera as a good that is necessary to maintain.

Until the 1960s the US government offered virtually no contributions to arts institutions. (Heilbrunn and Gray 2002) Most Americans were of the conviction that the government should keep its intervention in the economy to a minimum. For sure, a country "that is hardly willing to grant subsistence income to the poorest of the poor is not asked to pay for operas which were (and probably still are) considered as elitist and somehow 'reserved' for upper classes." (Heilbrunn and Gray 2002, 251) Indeed, the participation rate in the US on cultural activities is well behind other so called industrialized countries. (Heilbrunn and Gray 2002) Furthermore, the amount of contributions paid for culture is far less than in Germany. While Germany spends almost \$90 per capita the US gives less than \$5. (Arts Council of England 1998)

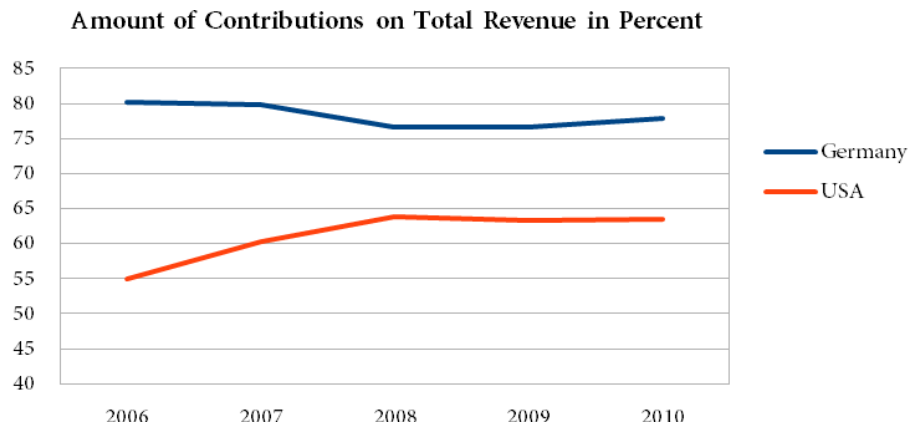
This significant difference is the result of the differing historical background. After all, because there have been mainly European artists being involved in the developing process the artistic, especially musical scene has not been able to expose itself as a national heritage. The stage of the American populations consolidation during this period has not been conferred on artistic values.

In economic terms, the importance of opera for the society as a whole can be seen by putting the percentage of attendance in opera performance in perspective. In the US in 2009 total attendance on opera performances was 4.3 million corresponding to approximately 1.89% on the total population. In contrast, German attendance of 5.8 million corresponds to approximately 7.07% in 2004. (US Census Bureau and Statistisches Bundesamt)

However, it is important to keep in mind that the German and American societies valuation for arts and culture differ significantly. It might be appropriate to put it this way: in the US cultural goods are more widely seen as some

kind of commodity, as something you can “use” like other mercenary assets. The appreciation of cultural products is therefore somewhat higher in Germany and goes beyond any economic measurement. This can be illustrated by a quote from cultural states minister Bernd Neumann: “Cultural funding is not to be seen as subsidy but as an indispensable investment in the future of our society”. (Mertens 1/21/2010)

Here we hit upon another difference in the systems although in both societies arts are considered being a “merit good”. It implicates that these goods need to remain affordable for the widest population possible. (Musgrave 1960) This principle is built into the mission statements and bylaws of non-profit arts organizations in the US as it is a part of the idea of the 'cultural mission' (Kultureller Bildungsauftrag) of German institutions. They have therefore a different influence on a PAO. In Germany this is expressed by having many cultural institutions in public ownership and therefore highly subsidized. American institutions may obtain the 501(c)(3) tax exempt status, which frees them from having to pay income taxes for any income related to their general mission and allows tax deductibility of donations and grants they obtain. ‘Unrelated business income’ though is still taxable and determined by many rules by IRS (Internal Revenue Service). This causes US institutions having to rely on donations and grants since governmental influence is still being kept very low.



This causes differing financial prerequisites that have to be regarded by comparing them. To get an indication of how big these differences actually are, it might be of interest to compare the share of unearned income (the amount of

contributions on total revenue). And as one can assume, the German institutions share is about 30% higher by having about 80% unearned income against about 60% in US institutions. This difference itself might not be surprising. It will be more interesting to discuss what this gap leads to.

However, it might be worth to mention that the financial crisis of recent years seems to have a greater influence in the US than in Germany. US earnings ratio rose considerably within the investigated houses. This is remarkable since my calculations show that revenue from sales (earned income) remained relatively stable which means that contributions have risen even in times of financial crisis. This paradox effect cannot be explained within this paper

and needs some further investigation as a more detailed analysis of the revenue structure would be needed. Germany seems to be even less affected by the crisis what can be very well illustrated by a statement from Ralf Bolwin, CEO of the German Stage – Association. He points out that even after the financial crisis hit especially German states and municipalities “there is almost no politician who has the power to manage massive reversal processes, mainly because they are still related to social detriments.” (Bolwin 2011)

4. The legal basis - Structural Comparison of German and American Opera Houses

To investigate our emerged hypothesis that US opera houses eventually handle their operations more efficient than Germans two things need to be discussed before. First, the consequences of their differing organizational structures need to be regarded and second, it has to be determined what 'efficiency' actually means in case of opera.

German opera institutions can basically have three different forms, which are not related to the size but more to the historical and geographical background of the house. They are publicly owned but exist in different legal forms which affects actual the managerial scope of action. These forms are called 'Regiebetrieb' ('Directors Enterprise') which basically is a part of the municipality and thus has very low control in terms of economic decisions. The 'Eigenbetrieb' ('Owner Operated Municipal Enterprise') is still dependent on the public owner but with some more authorities in financial issues. The publicly owned limited liability company (LLC) form is the form most similar to the US' form and enjoys the greatest freedom within their scope of action.

To explain these forms in detail and where exactly differences and problems occur would go beyond the scope of this context. It shall be referred to Mahmalat (2012) or Rauhe et. al. (1997). It can be summarized though that the intensity of governmental influence is somewhat lower within privately owned forms than within publicly owned although all somehow converge to each other. (Rauhe et al. 1997) It is important to see though that the relationship of German institutions to strict and stiff human-development and economic plans is critical and causes many problems that reduce the ability to actually behave more efficient. (ibid.)

US performing arts institutions are mainly organized as a non-profit enterprise within a LLC basis. As such, the company usually reached the already mentioned 501(c)(3) tax exempt status. The organizational structure is legally given and includes a structure which divides the powers of the artistic director and the CEO within the board of directors. The artistic director gets appointed by the CEO and is thus subordinated as every other department as well. Thus, he has to coordinate all expenses and projects with the CEO (Hurwit & Associates 2011).

Generally US non-Profits have to face two main restrictions that constrain the power of the administration. First, they have to obey their mission statement very carefully to ensure to not lose their tax exempt approval. This means that the administration has to invest in projects that contribute to the mission however profitable they might be. Within the actual elaboration the company is relatively free. The second constraint is given by restrictions in public funds and donations which are often contributed to a certain investment or purpose. Income that is subject to such

conditions is called a 'restricted income'. These funds have to be accounted separately which makes it necessary to draw on certain methods of 'creative accounting' to minimize the negative effects of restricted income. (Pakroo 2009)

After all, the restrictions US institutions have to face are less distinctive as in Germany since they can make organizational decisions by themselves without time intensive arrangements with any legal entities. Hence, an US performing arts institution can much more be seen as a 'normal' business enterprise as a German institution regardless their actual form even though their received contributions can much more be seen as unrestricted income within LLCs.¹

As discussed, the basis for evaluation processes in Germany and the US differs, less in case of the output - the opera performances - but more in terms of financial groundwork and policies to be obeyed. As US institutions need to operate entrepreneurial, German institutions dependency on governmental contributions also leads to a shift of the valuating framework of executive decisions. Norbert Thomas, former artistic director of the Munich Philharmonie, gets right to the heart of the problem:

“Many artistic directors establish their program planning for the season and realize too late that they do not have enough money for it. That would not be possible in a common economic company. But you actually can do it in case of opera by just taking the money from the taxpayers.” (Mertens 11/25/2010)

This statement aims on a fundamental problem of the German supporting system. As soon as a director realizes savings he takes the risk of obtaining less contributions in the next season because he shows that he obviously does not need the money.

This indicates a basic problem in the German public cultural institutions incentives system as a whole but applies for opera in special. Since it is very difficult to fill revenue gaps related to a shortage in governmental contributions with higher ticket sales many institutions accordingly take less effort in trying to generate new audiences. E.g. it is estimated that only 10% of all opera companies have a well working marketing section. (Mertens 11/25/2010) It is not even necessary trying to prove on an empirical basis that this is much less likely the case in the US, thus within a system that fully relies on the own responsibilities of the boards of directors and has no backup system.

Another organizational difference also needs consideration. The prevailing organization system in Germany is called the *repertory* system which provides nightly alternating performances of several operatic works over the performing

¹ There are very few actual exceptions. One example for independence is the opera Baden- Baden which on the other hand has to face other circumstances in the social environment which makes it possible for them to take much higher ticket prices.

season. This requires a larger staff and more permanently employed singers. The opposed system is the *stagione* system, the classic Italian system, whereby one opera is given a certain number of performances over several weeks in the house exclusively. This leads to a lower performance number on average and higher costs because principal singers are hired by the opera over the whole rehearsal period plus the performance weeks. Since singers cannot sing a whole opera night after night without damaging their voices this system leads to be even more expensive as there are a number of “dark nights” in the theater. Many US opera houses reaching a certain size though use a mixture of both systems. (Towse 2010)

5. Economic Comparison of US American and German Opera houses

Since some organizational prerequisites have been clarified the actual comparison can be discussed.

But what may be compared?

To eventually find a ratio that comparably describes an institutions efficiency is not easy since only a very few numbers given in balance sheets and income statements are actually comparable. This being the case due to the differing regularities to be obeyed as mentioned in chapter 4. For example, ratios including profit may not be compared since surplus capital might lead to budget cuts in following seasons for German institutions. Consequently, by not being allowed to compare profit, debt ratios are hardly comparable either and so on. The following table shows which parameters are investigatable within this context and which are comparable.

Criteria	Investigatable?	Comparable?
Profit	Partly	No
Revenue	Yes	No
Debt	Yes	No
Common Equity	Yes	No
Operating Income	Yes	Yes
Wages	Yes	Yes
Workload	No	Partly
Reputation	No	Yes
„Quality“	No	Yes

It becomes obvious that there are not many usable parameters left for a comparison. Thus, any ratios for a direct comparison must be handled with caution. However, there are some parameters left which eventually allow to dare a comparison. Since the audience structure plays an important and interesting role for an institutions financial scope of action this will be analyzed first. This will lead to one of the key economic measures for arts institutions, the earnings gap, which gives a hint for possibilities to eventually derive which operating ratios might be compared to indicate efficiency.

Audience Structure

Cultural institutions generally have to deal with an under-representation of certain audience layers. This is a problem, as a main reason of keeping cultural goods, specific merit goods, subsidized is the attempt to make culture affordable and accessible to the widest population possible. Detailed examination of income distribution of attendees at classical music performances show a wider gap between incomes at US organizations than their German counterparts. It can be seen that the gap in attendance on classical music activities between the group with the lowest income and the highest income is much greater in the US than in Germany. The attendance of the lowest income class of less than \$15,000 income per year on at least one performance a year equals almost 40% of the population in Germany, compared to 4.0% in the US. On the higher income level of over \$30,000 per year, the difference is 64% in Germany to 12.38% in the US. So, people with a high income in Germany use to attend 1.6 times more often on a performance than the lowest income layer whereas richer US citizens attend 3.1 times more often. (US Census Bureau and MIZ 2008) Thus, U.S. arts audiences with relatively low or even moderate income are grossly underrepresented. (Heilbrunn and Gray 2002)

The occurrence of this gap might have two obvious reasons. First, it might be appropriate to assume that ticket prices are generally higher in the US. This is not the case or in sometimes even vice versa. Because of the general mission statement respectively the social mission of a non-profit institution it is usually ensured that a certain amount of tickets is offered at a low price level (next to other discounts like special offers for students, etc.) as they are strongly motivated keeping a certain amount of tickets priced as low as possible anyway to increase demand and thus participation. (Heilbrunn and Gray 2002) Thus, the reason for the *attendance gap* might not lie in the pricing structure in the first place.

The second and probably more important reason is given by the *lag of information*. As Heilbrunn points out:

“The arts are rightly said to be an acquired taste, meaning that the consumer has to be familiar with them to enjoy them and that once consumers do become knowledgeable, their demand is to increase markedly. But consumers are not in a position to acquire the taste if they lack information.” (Heilbrunn and Gray 2002: 237)

Higher income is generally related to higher education. Moreover, as discussed above, the valuation of cultural goods in the social environment differs, which also contributes to less demand in those. This makes the effect of the lag of information somewhat stronger in social environments with lower education and income than on high ones.

(McCarthy et al. 2007)

What does that mean? First, when the audience structure has a higher income in average the institutions have other possibilities for raising money from other venues than ticket sales alone. Second, they are more flexible in their ticket pricing, which offers another option in adjusting the business to market relations and realities as it is an advantage to reach the general goal of maximizing revenues from ticket sales. (Towse 2010)

The system of contributions and donations in the USA leads to a somewhat more complex relation between each other as higher ticket prices are likely to affect the total of donations. Thus, institutions are seeking for ways to maximize revenue from a combination of personal support and ticket sales, not ticket sales alone. Arts organizations may well believe that a decline in ticket prices can be more than offset by personal giving supposed to increase. (Hansmann 1986) However, this assumption implies a more flexible and dynamic handling of the revenue structure in the US than in Germany and thus little systemic advantage as German institutions usually do not obtain mentionable private donations.

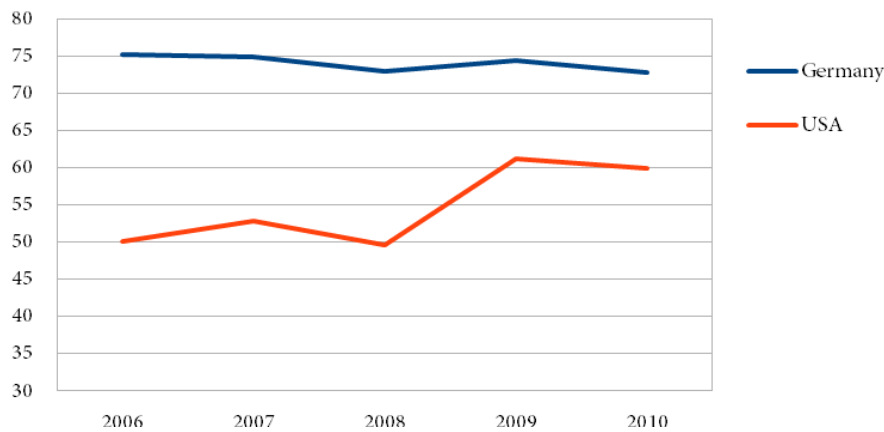
The Earnings Gap

This leads to the difficulty of the earnings gap, probably the biggest influence for price adjustments. The earnings gap is defined as earned income (revenue from ticket sales etc., not contributions and grants) subtracted by operating expenses, generally in relation to total expenses in percent. (Baumol and Bowen 1966)

At first, a high gap does not necessarily mean financial trouble for an institution. It could indicate that the company is doing very well in terms of fundraising and other outside support. The higher the gap, however, the higher the potential risk to get into financial trouble if, for instance, economy goes down, changes in tax law are enforced or government decides to cut back contributions. Thus, relying heavily on one source of funding tends to be the riskiest method to finance the gap because an impact for whatsoever reason is less likely to be compensated through other sources in a short term. Therefore, it is possibly worth to think about the effect of trying to diversify the risk of the earnings gap by financing it through a variety of different sources.

As to be assumed from the calculations above, it can be seen that the earnings gap for German operas tends to be much higher than the gap US institutions have to face. The average gap can be indicated to be approximately 75% for Germany and averaged 55% for the US, the German gap slightly declining and the US' gap increasing presumably relating to the financial crisis in 2008. The difference is, of course, mainly the result of high government subsidies in

Earnings Gap in Percent of Total Expenses



Germany, which in turn allow their institutions to rely on a very stable source of income.

What can be inferred out of these numbers? On the first sight they serve to the hypothesis German institutions having a less efficient operating structure than Americans

as they obviously spend more money in having an opera show produced than Americans. But it has to be kept in mind that the revenue structure is different which is why no accurate inferences about the operating system can be drawn from it. To do this some other more significant ratios have to be found.

More interesting about this ratio, though, is the fact that one could assume that German institutions bear more financial risk. On the first hand their stable income source provides the possibility of very accurate planning and forecasting. (Rauhe et al. 1997) But as they rely to such a high percentage on governmental contributions they are even more hit if this source is cut. As it is the case for many especially smaller companies, this leads to the problem that a companies' financial situation is less likely to be compensated by business adjustments when governmental subsidies decrease. This being related to economic realities such as the financial crisis and high governmental debt. However, as being indicated by the statement of Bolwin and stable German attendance numbers (MIZ 2008), the German system of subsidies is not put up for negotiation fundamentally yet. But the notion that cultural institutions should pay their part to the regeneration of governments finances is coming more and more into public focus. Thus, contributions tended to decrease for years now which forces many institutions into serious trouble. (Press release AT Kearny 2010) Smaller companies are, because of this problem, even more hit by governmental cutbacks. As Hilda and William Baumol (1985) pointed out, this development will likely lead to an artistic deficit as soloists and big orchestras become too expensive in relation to the house. This leads into another doom loop since no bigger audiences can be reached which makes it even more difficult to close the earnings gap with higher earned income.

As deliberated earlier, it might be of advantage to not rely too heavily on only one source of funding and to not let the earnings gap become too high. This is more the case for US institutions, which rely on a mixture of some governmental subsidies, personal giving, corporate funding and higher earned income compared to German ones.

This leads to more volatility in terms of revenue as also indirectly of the earnings gap. This being the case as funding and personal giving are more related to the developments in the economy as a whole. This provides more possibilities to escape from the cycle as the system is geared on many different aspects of fundraising and thus gives more options for adjustment. As discussed in the last chapter this is much harder to enforce in German institutions.

It can be summarized, that although German institutions can enjoy a more stable source of income and thus have to take less effort to raise it they are more exposed to *react* on a financial impact whereas Americans have to bear more risk in terms of volatility of revenues but can *operate* to reduce revenue gaps somewhat easier.

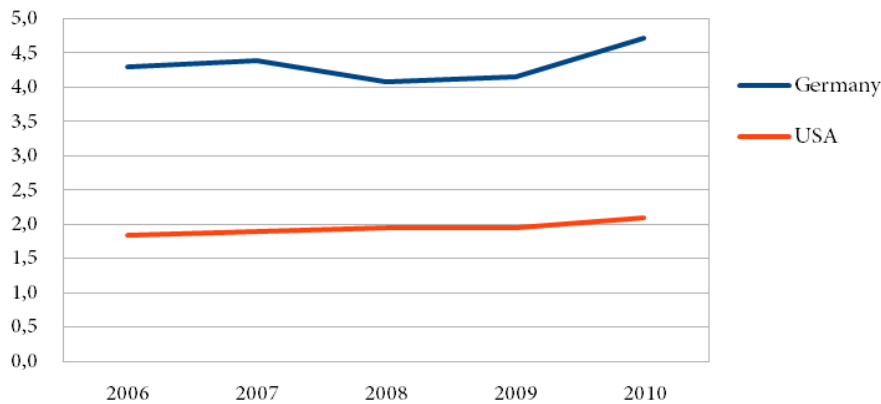
Production Expenses

Here it gets right to the heart of the discussion. Until now there could no inferences be drawn to the actual operating processes. Most important is the problem of the structure of production costs, including the employee structure and wages system, also being related to the earnings gap problem. PAOs in general and opera in special have to face the problem of high fixed costs and very low marginal costs whose positive effect is not able to offset the effect of the fixed costs entirely. (Towse 2010) This contributes to the earnings gap and has to be financed through donations and grants as discussed above.

Since external accounting is inaccurate in terms of operating expenses there is almost no parameter to be found on balance sheets and income statements able to indicate the efficiency of operating expenses. But PAOs provide a service, which makes their operating process is very staff intensive. Thus, expenditures for wages can give a hint on how many workers have to be employed to ensure the opera keeps running and with that, how well organized the house is. And by referring on the revenue they generate, thus sales, their wages might be compared. This is the wages-over-sales ratio and indicates how many dollars in wages must be spent to generate one dollar in sales. If the starting hypothesis was right German institutions ratio should be much worse.

And indeed, the calculations show what already could have been expected. The wages-sales-ratio for US operas averages two with a slight but stable growth whereas the ratio for German institutions with almost five is more than twice as big. This again seems to be a systemic difference worth to be discussed.

Wages-over-Sales Ratio



To explain these differences it first can be assumed that US institutions have to pay less for social expenditures than Germans as payroll taxes and retirement plans are meant to be somewhat lower in the US. By calculating the social expenditures on total wages it can be seen that German institutions pay

19% and US' 15% averaged. This explains the gap until a certain point but will certainly not be responsible for the gross amount.

Second, it can be assumed that ticket prices or number of tickets sold due to a higher workload of the houses is higher in the US. As mentioned earlier, however, the level of the ticket prices is probably not generally higher in the US. Furthermore, the number of seats available of all houses investigated here is averaged the same and lies between 1.000 and 1.300. As monopolists in metropolitan areas, operas have almost full control about their pricing and can adjust it to local realities in demand relatively easy when necessary. (Heilbrunn and Gray 2002) Moreover, as discussed above, since the overall demand in Germany is higher than in the US those circumstances are not good to explain the big offset either. However, this point needs further investigation. The pricing structure needs to be regarded in greater detail as it would be important to compare the number of performances played per year. There might also be differences in the workload, however, which reasons and influences will be regarded a little later.

Third, the average wages level in Germany might be higher. This fact though would certainly be diminished by higher ticket prices due to the overall demand-supply-curve in the society as explained by Heilbrunn and Towse in detail. It seems to be as there are no studies available that provide comparable data covering the question of the relation of wages-levels of employees and average ticket prices explicitly in an international environment. As this goes beyond the scope of our calculations we cannot make any accurate assumptions about this.

Moreover one could assume that unionization makes a difference in the wages structure. German institutions are generally unionized which in turn might lead to higher salary since US-American are often not unionized at all - especially in the southern regions. Interestingly though this seems to make no difference since the ratio for US

institutions is the same in unionized houses and not-unionized ones. As there are only three and three houses compared though this question again is a matter of further investigation.

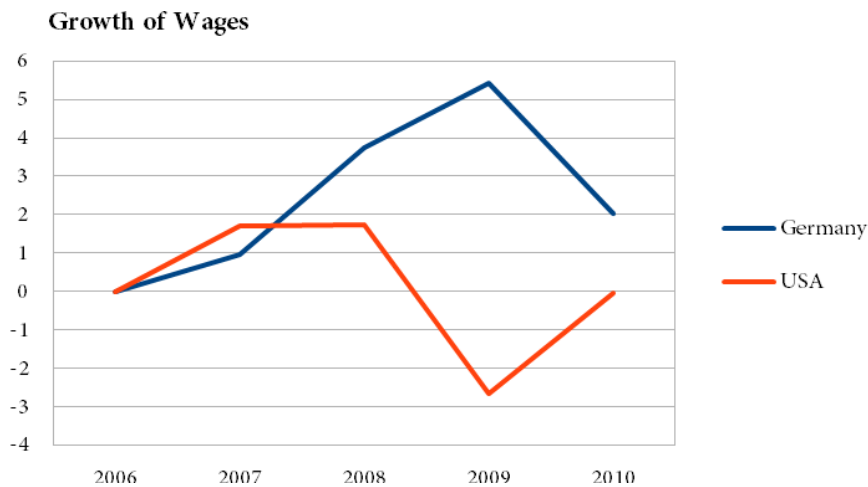
However, it seems to be the case that German institutions simply use more employees to generate their earned income, which relates to the hypothesis that US institutions are able to handle their production system more efficiently than Germans.

To see what actually contributes to this higher usage of employees the *artistic staff* and the *operating staff* should be regarded differently. Moreover the differences in the prevalent systems, the stagione system in the US and the repertory system in Germany, need to be considered.

The required artistic input for a single production remains the same, regardless the environment due to the same requirements for an opera production. Playing Mozart needs the same number of singers and orchestra members in Germany as in the US. Assumed the case, the one or the other system is more likely to use a higher amount of high paid top singers and would thus pay more for the artistic staff, this would more likely be the case in the US as German institutions normally do not hire singers for a single production but for a whole season.

Thus, although German institutions mostly use the more expensive repertory system, the wages of the artistic staff cannot be used to explain our gap entirely. This being the case as the numbers of performances per year in Germany might generally be higher due to the repertory system, which leads to more revenues out of ticket sales over the whole season. However, there again seem to be no empirical data available, which makes this assumption a matter of further investigation. This would go beyond the scope of this discussion.

Whatever the actual influences and offsets are, the gross amount of the gap should rely on the operating staff. As every opera production is an unique product, it is not possible to resort to experiences of past performances. This results in the simple fact that the effort of theaters using the repertory system is much higher as in theaters using the stagione system as the working progress is not likely to be rationalized by past experiences. This is a basic disadvantage German institutions have to face and leads to a higher employee occupation that is less easy offset by higher ticket sales out of a higher workload because of this specific circumstance. (Rauhe et al 1997) In this case, though, the investigated houses are big enough to show a high amount of shows a year and to not having to use the stagione system entirely. Thus, even this very obvious fact is probably not good to explain the offset to its extent either.



Another reason is the difference between the labor-market systems since labor laws in the US are more flexible. (Louven 2003) This can be indicated by our calculations for opera companies. As German institutions growth of wages tend to rise even during 2008 and 2009, US' institutions growth of wages declined rapidly.

Rauhe points out a problem that is the result of this circumstances, which even more apply to the German collective bargaining law for publicly owned institutions in general. Every institution must obey a vast number of rules and plans by managing their employee structures, which make them slow and inefficient. So, even if an executive thinks that there are possibilities of adjusting the business activities they are less likely able to eventually implement these changes. Thus, as the German system handling PAOs gave and still gives less incentives for business adjustments, inefficient structures are much more likely remaining constant. This contributes to the higher gap as more employees have to be paid due to the high output system of German operas, which makes this effect even worse.

Another point might also be important: volunteering. The number of volunteers can make up to half of the total number of fixed employees in an US institution, at least in numbers stated on the Tax-990-Forms on which this study relies on. How much they actually contribute to the performance of an institution though is not indicated, which causes problems in evaluating their work for this papers purposes. This being even more the case as volunteers should normally not be able to work as effective as fixed employees due to less training in the specific field. So volunteers are less likely deployed in important fields like stage operations, manufacturing or even artistic matters but much more likely in gastronomy and ticketing where their working power can be used more efficiently. As the 990-Forms do not allow to divide wages into different categories it is hard to say how much volunteering actually contributes to the performance process of an institution. Moreover, is it not useful to take the number of volunteers to total employees empirically as they are often even only estimated.

However, the amount of volunteers is not negligible what might give reason for a mentionable influence. As volunteering is much less marked in Germany this factor is likely to have an influence on the wages-sales-ratio gap.

6. Summary

The ratios calculated above try to give an answer on the question if US-American opera institutions handle their operating systems more efficiently as German ones. This is being indicated by the wages-over-sales-ratio and the earnings gap (as the earnings gap includes the operating expenses). These ratios are almost the only calculations eventually comparable since ratios including income, debt and revenue are not usable due to the different supporting systems. Moreover, distinctions in accounting methods prevent a comparability of asset management ratios since German institutions do not list their inventory consistently and as equity ratios are not comparable at all. Wages, sales and expenditures are thus the only comparable ratings as they are directly related to the actual output of an institution - the opera performance.

In all used ratios US institutions have a significantly lower grade. As already pointed out, the high wages-sales-ratio for German institutions suggest a worse relationship of working power to reached output. Moreover, the earnings gap does not only imply a higher dependence on contributions for German institutions but also higher operating expenses as a whole in relation to their earned income.

What factors are responsible for this lower performance of German institutions? What can be derived from these numbers, and is being assumed by Beutling, is a less important role of controlling instruments used specific for performing arts. Artistic success is still the most important managerial aspect in Germany which causes controlling instruments being less developed. (Rauhe et al. 1997) Along with an already higher effort in decision making processes, this might well contribute to over-employment, double work and higher operating expenses. (Mahmalat 2012)

The environmental factor though is the broadest and probably most important factor. It can be summarized that the advantage, German governmental subsidies may be considered as unrestricted income, seems to be more than offset by the political framework that cuts back this freedom of usage.

After all one could assume that US operas are doing 'better' than Germans. Fact is though that the system has to pay a price for that. Not only does a high share of restricted income affect the overall financial scope of an institution, the artistic freedom is being affected as well. This entails that programming is likely being orientated on certain audience groups or endowment funds to ensure a maximum of donations and grants. Whether these aspects offset each other is in the eye of the beholder.

References

- Arts Council of England, "International Data on Public Spending on the Arts in Eleven Countries", March 1998
- AT Kearny. Press release from 8/18/2010,
(www.atkearney.de/content/veroeffentlichungen/pressemitteilungen_detail.php/id/51130)
- Business Dictionary Online, "Cultural Value", Access 12/22/2011
- Baumol and Bowen. 1966. "Performing Arts: The economic Dilemma", New York: Twentieth Century Fund
- Baumol, H. and W.J. 1985. "The future of the theater and the cost disease of the arts", in Mary Hendon et al., eds., "Bach and the Box: The impact of television on the performing arts", Akron: Association for cultural economics, p. 17
- Bell, J., et al., 2010. "Nonprofit sustainability", San Francisco: Jossey Bass
- Beutling, L. 1997 "Theatermanagement", in: Hermann Rauhe et al, "Kulturmanagement: Theorie und Praxis einer professionellen Kunst", p.281
- Bolwin, R. 2011. "Theater und Orchester gestern, heute und morgen – Eine Welt der Kunst in Zahlen" from "Wie geht es weiter mit dem Stadttheater?" and preface to the Theaterstatistik 2008 /2009, Köln: Deutscher Bühnenverein
- Deutsches Musikinformationszentrum. 2008. "Freizeitverhalten der Deutschen 2007" and "Veranstaltungen und Besucher der öffentlichen Musiktheater", Bonn: Deutscher Musikrat, www.miz.org
- DiMaggio and Stenberg. 1985. "Why do some theaters Innovate more than others? An empirical Analysis", Poetics 14, 1985, pp. 107
- Felton, M. 1994. "Historical Funding Patterns in Symphony Orchestras, Dance and Opera Companies, 1972-1992", Journal of arts management, law and society 24 no 1, 1994, table 11
- Florida, R. 2002. "The rise of the creative class", New York: Basic Books
- Globerman and Book. 1974. "Statistical cost functions of performing arts organizations", Southern economic journal 40, no 4, 1974, p. 671
- Hansmann, H. 1986. "Nonprofit Enterprise in the Performing Arts", New York: Oxford Univ. Press, pp. 17-40
- Haselbach et al. 2012 "Der Kulturinfarkt: Von allem zu viel und überall das Gleiche. Eine Polemik über Kulturpolitik, Kulturstaat, Kultursubvention.", Munich: Albrecht Knaus Verlag
- Heilbrunn and Gray, 2002. "The Economics of Arts and Culture", Cambridge: Cambridge University Press
- Hurwit & Associates, 2011. "Non- Profit Recourse Library",
(http://www.hurwitassociates.com/l_charts_traditional.php), Access: 11/13/2011

- Louven, S. 2003, "Warum Arbeitnehmer in den USA so zuversichtlich sind", Der Tagesspiegel, 03/30/2003
- Mahmalat, M. 2012. „Aspekte zur Zukunftssicherung öffentlich getragener Kulturbetriebe“, Saarbrücken: AV Verlag
- McCarthy et al. 2007. "Arts and culture in the Metropolis", Santa Monica: RAND
- Mertens, B. 2010. "Deutschlands Musiktheater im Wirtschaftlichkeits-Check", Wirtschaftswoche from 11/25/2010 and "Ewiges Gejammer des Kulturbetriebs", Wirtschaftswoche 10/24/2010
- Musgrave, R. 1960. "Theory of public Finance", Southern Economic Journal Vol. 26, no. 3, 1960
- Netzer, D. 1978. "The subsidized Muse", Cambridge: Cambridge University Press, p. 26
- Neumann, B. Interview in Süddeutsche Zeitung from 21.1.2010
- Noltze, H. 2010. "Die Leichtigkeitslüge- Über Musik, Medien und Komplexität", Hamburg: Edition Körber-Stiftung
- Ostendorf-Rupp, S., 2009. "Nonprofit vs Social Profit, Kulturmanagement in den USA", 12.6.2009, (<http://kulturmanagementusa.blogspot.com/2009/06/nonprofit-vs-social-profit.html>), Access 11/11/2011
- Own calculation based on balance sheets and income statements of twelve opera institutions in Germany and the US. (Germany: Bremen, Hamburg, Frankfurt, Düsseldorf, Essen, Hannover; USA: Chicago, Houston, Washington, Seattle, San Francisco, Pittsburgh)
- Pakroo. 2009. "Starting and building a Nonprofit", Berkeley: Nolo, p. 225
- Ruzicka, P. 1997. "Musiktheater", in: Hermann Rauhe et al, "Kulturmanagement: Theorie und Praxis einer professionellen Kunst", Berlin: de Gruyter, pp. 257
- Statistisches Bundesamt. "Datenreport 2006- Zahlen und Fakten über die Bundesrepublik Deutschland" p. 151 (one person per attendance assumed)
- Towse, R. 2010. "A Textbook of Cultural Economics", New York: Cambridge University Press
- U.S. Census Bureau. 2011. "The 2012 Statistical Abstract", own calculations on tables 471, 1234, 1235, 1238 and 1240, (www.census.gov)