Museum statistics and cultural policy*

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Truly comparative cultural research

Comparative cultural policy research has changed its orientation and methods since the early 1970s, moving from institutional to networked exchanges, and has arrived at an approach which favours integrated research projects (Wiesand 2002). In the early 1970's a handful of experts wrote specialized papers on comparative cultural policy research on behalf of UNESCO. The insights of these papers raised the curiosity of political actors who wondered if policy solutions in other countries could contribute to the solution of domestic policy problems. Since that time official international and European organisations (f.e. Council of Europe, UNESCO) have contributed to these cross border activities. Yet country-centric reports with few cross-cultural references dominated in the 1970s. Nevertheless at that time common aims and methods were discussed. These discussions can be considered as "a pioneering attempt to resolve the widely varying national approaches to culture" (Wiesand 2002: 372). Since the 1980s organizations such as the European Commission and the Council of Europe are increasingly contributing to truly comparative cultural research projects (D'Angelo and Vesperini 1998). This development was considered sufficiently disruptive by Wiesand (2002) to be addressed as a paradigm shift.

The comparison of national policies and experiences has been the focus of attention in much of the cultural policy research. One could consider the work on European cultural statistics as a part of this broader research field. Cultural statistics concern quantitative information on the cultural field such as numbers of cultural organisations, their visitors, expenditure and their employment. The work on comparative cultural statistics started relatively late. In the 1990s the lack of comparable cultural statistics at EU level was discussed in a number of European conferences. On 20 November 1995, the Council of Ministers adopted a resolution concerning promotion of cultural statistics and economic growth as a follow-up to several meetings of national experts. This resolution was initiated under French, Spanish and Italian Presidencies. In doing so, the Council confirmed its resolution of 1992 with the same topic. The statistical institute of the European Union, Eurostat set up a pilot project, the so called Leadership Group (LEG) on «Harmonisation of Cultural Statistics in the EU», approved by Statistical Programme Committee (SPC) 13th March 1997 with the task of "developing cultural statistics capable of describing the European cultural scene and enabling inter-country comparisons to be made easily". This work continued into the new millennium and found several new platforms after the final report was published in 2002 (LEG 2002). A recent development is the establishment for a period of two years of the European Statistical System Network on Culture (ESSnet) in 2009 also aiming at the harmonisation of European cultural statistics. ESSnet focuses on four areas: framework and definitions, financing and expenditure, culture industries and cultural practices and social aspects.

One of the platforms where a network of specialist organized their work on comparable cultural statistics is the European Group on Museum Statistics (EGMUS). This group was established in 2002 as a mergence between two groups. The first group was the Working Group for Museum Statistics which started in December 1999 and was in turn based on the previously mentioned Leadership Group (LEG) on cultural statistics. The second group is the so called "Berlin conference" which was initiated in 1995 by the *Institut für Museumskunde* (Institute for Museum Research) in Berlin. In 2010 27 European countries, from within and outside the European Union, were represented in this group. The main objective of EGMUS is the collection, comparison and analysis of statistical data on museums and the publication of comparable statistics. The harmonisation of Europe-wide museum statistics is EGMUS' long run goal. The Mission Statement of EGMUS is: "Collect and compile available statistical data on museums in Europe and promote the harmonisation of museum statistics" (www.egmus.eu). Available data from national museum statistics and surveys are compiled and updated and stored in the Abridged List of Key Museum Indicators (ALOKMI) table. The ALOKMI is the first step towards the harmonisation of museum statistics in Europe (see www.egmus.eu). Ever since working groups started convening on cultural statistics the issue of comparability has been high on the agenda. In European countries data have been collected according to different definitions, different methods and different classifications. Presenting these data often requires additional information for the reader with regard to different bases in the collection process. Many tables contain a wide range of footnotes highlighting the difficulties of comparison. In the EGMUS group the ambition with regard to presenting tables has always been straightforward: reducing the number of footnotes.

It is not intended here to discuss all the difficulties with regard to the comparability of data. This paper takes an alternative approach by focusing on the possibilities of the EGMUS data. This does not imply that the issues around comparability are solved. On the contrary there is still much work to be done to make the data truly comparable. But on the other hand, waiting until the data are perfect before analyzing them would also imply a loss of information. This paper illustrates some of the potential of the EGMUS data by focusing on the number of museums in European countries, the government expenditure, their visitors and the work on the digitization of their collections.

What is a museum?
Most people will think of a museum as a large and impressive building, often containing a display of art objects. However, many museums are actually quite small in size and certainly not as impressive as the Guggenheim in New York or Bilbao, the British museum in London or the Uffizi in Florence. They do not always show art, or rather: most are not art museums. And the exhibition of objects is not the only function of a museum. It is easy to recognise a museum when you see one, but they are much harder to define. There is a history of discussion about how a museum can actually be defined. The problem with any definition of a museum is that as soon as you understand it, you'll find an exception to the definition. Definitions referring to a building are not adequate anymore with the rise of webmuseums. Do we need to include zoological, botanical gardens and aquariums in the definition? And archaeological sites? Such questions have been subject of many discussions. Yet, in order to know how many museums there are in different countries, a common understanding is needed. What is considered a museum in the Netherlands should

be the same in Norway or Slovenia. It is more than only a question of words; it is a question of ideas and conceptions too.

A lot of museum definitions have been presented, but the most authoritative is the one by the International Council of Museums (ICOM). Even their definition is not static but has evolved in line with developments in society. Since the first definition was given with the creation of ICOM in 1946, their definition has been updated seven times. The most recent definition was formulated in the ICOM Statutes in 2007: "A museum is a non-profit, permanent institution in the service of society and its development, open to the public, which acquires, conserves, researches, communicates and exhibits the tangible and intangible heritage of humanity and its environment for the purposes of education, study and enjoyment" (http://icom.museum/who-we-are/the-vision/museum-definition.html)

ICOM General Secretariat does not maintain any statistical data and therefore cannot provide figures on the number of museums and their attendance in the world or in specific countries. For sources of information on museum statistics they refer to National Central Statistical Offices or advice to contact the European Group on Museum Statistics (EGMUS) for statistics in Europe. EGMUS has adopted The ICOM definition as a part of the Abridged List of Key Museum Indicators (ALOKMI). In addition to this definition EGMUS also covers the following institutes, monuments and sites:

a) Conservation institutes and exhibition galleries on libraries and archives centres;
b) Natural, archaeological and ethnographic monuments and sites and historical monuments and sites of a museum nature, owing to their acquisition, conservation and communication activities.

However the data collected in countries associated with EGMUS are based on the definition of the national statistical offices, their museum association or another institution collecting data. These organization do not always conform to the ICOM definition. Actually, from the 28 countries in the EGMUS database, only eleven indicate they conform to the ICOM definition, 13 use a national definition and 4 countries do not provide information on what kind of definition is used. Some countries such as Greece and Ireland realize that the ICOM definition is more general, but still consider their definition essentially in agreement. Countries that consider their definition essentially different from ICOM's definition are f.e. France where only museums are surveyed that have obtained the appellation "musées de France" according to the law. This strongly limits the number of institutions that that are actually counted as museums. Also in Belarus only museums registered by Ministry of Culture are surveyed. In Hungary a license of operation is necessary for museums and sites of museum nature to be considered a museum institution and only these are included in the statistics. The Croatian Museum Act defines museum activities rather than a museum itself. In Portugal 5 criteria need to be fulfilled in order to be counted as a museum and these national criteria deviate somewhat from those set by ICOM. And also other countries indicate to use a national definition. This limitation is hard to overcome and impossible to restore once data have been collected.

How many museums?
Disregarding the difficulties of definition, what can be said about the number of museums in European countries? Since data are not collected in each country in the same year, there may even be differences between countries complying to the

museum definition. As the last revision of the museum definition dates back to 2007 figures on museums before and after have a different underpinning. However limiting the number of countries to those that have data from 2007 or a later year means a too restriction. The database contains only 14 countries with data in the period 2007 and later. Therefore countries were selected that had collected data at least once in the period 2004-2009 and reported these to EGMUS. France, Great Britain and the Slovak Republic have data older than 2004 and are not included. This leaves a set of 25 countries to be analysed. Table 1 shows the number of museums for these countries.

Table 1 Number of museums per country, 2004-2009.

Austria (AT)	399
Belarus (BY)	145
Belgium (BE)	162
Croatia (HR)	222
Czech Republic (CZ)*	466
Denmark (DK)	258
Estonia (EE)*	224
Finland (FI)	322
Germany (DE)	6.175
Greece (EL)*	176
Hungary (HU)	671
Ireland (IE)	258
Italy (IT)*	430
Latvia (LV)*	128
Luxembourg (LU)*	39
Macedonia (MK)	22
Norway (NO)*	148
Poland (PL)	690
Portugal (PT)*	572
Romania (RO)*	748
Slovenia (SI)	164
Spain (ES)	1.455
Sweden (SE)*	175
Switzerland (CH)*	1.061
The Netherlands (NL)*	775

*EGMUS working group definition

Obviously in larger countries there are in general more museums than in smaller countries. Figure 1 shows the relationship between the number of museums in a country and the number of inhabitants. For matters of presentation Germany is not included in this figure since this would clusters most of the other countries in a dense cloud which would make the figure hard to interpret.
The relationship between the number of museums and the number of inhabitants is quite strong. Figure 1 presents a trend line with an explained variance of .33, which is similar to a correlation of .57. When Germany is added to the analyses this relationship is even much stronger with an explained variance of .61 (corr.: .78). This shows that the results of the analyses are easily affected by a single case (country) especially when it concerns a country with large numbers. In statistical terms relatively low number of cases (countries) in the analyses is associated with unstable outcomes. Figure 1 further demonstrates the relatively high number of museums in Spain and Switzerland and the relatively low number in Italy.

Figure 1Numer of museums, by country and number of inhabitants (*1.000.000)
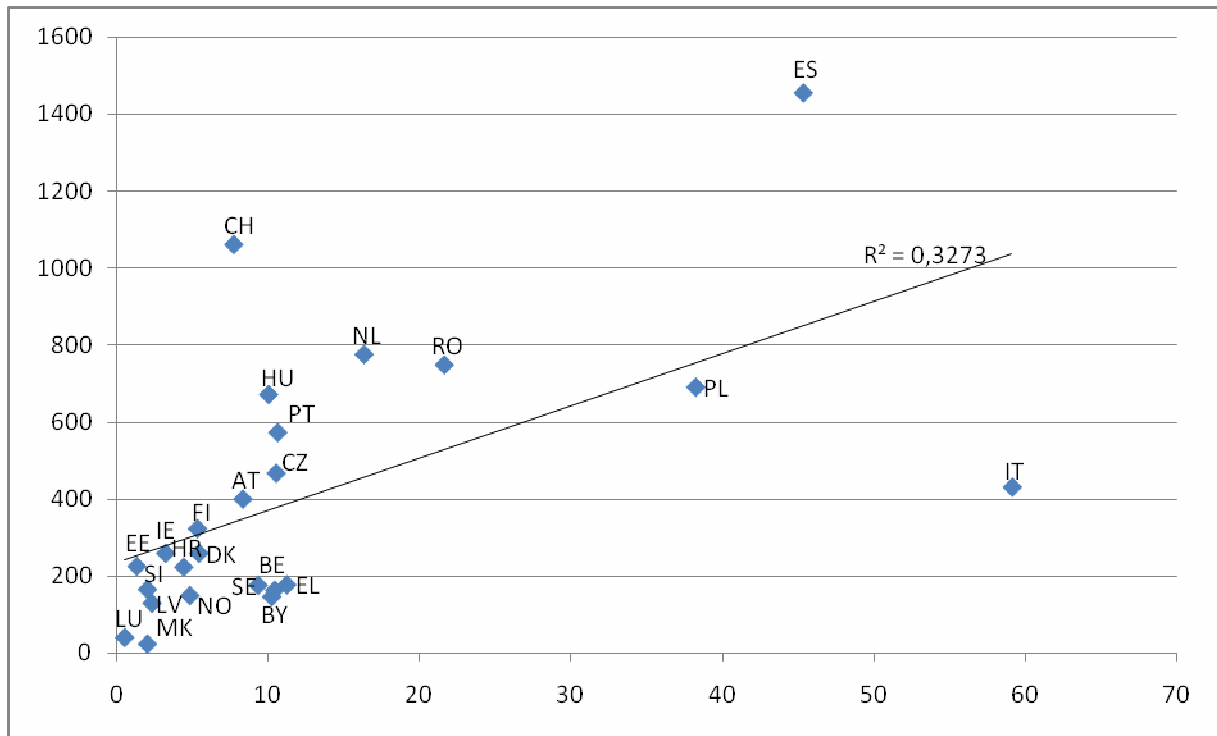
Another way to present the museum density is showing the relationship between the number of museums in a country per 100.000 inhabitant. Figure 2 shows more clearly that in some smaller countries such as Estonia, Luxemburg and Slovenia the number of museums is relatively high. Relatively low is the number of museums in Belgium, Belarus, Italy and Macedonia.

Figure 2 Number of museums per 100.000 inhabitants
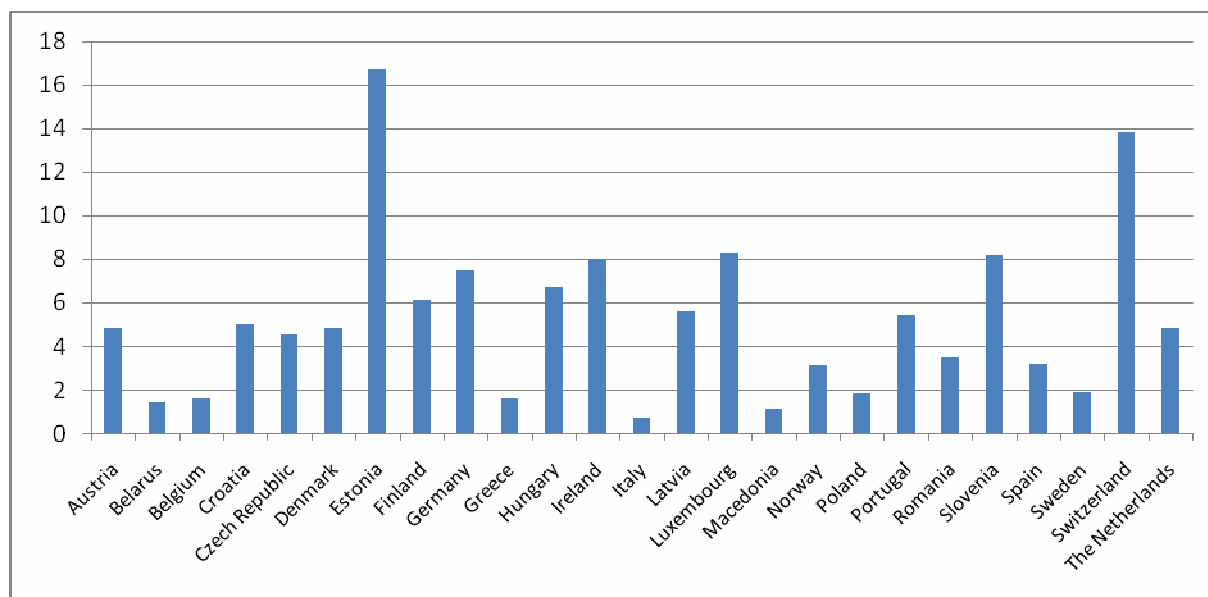
The number of museums and government expenditure on culture

Since most museums depend to smaller or larger degree on government finance it is interesting to know to what extent the number of museums is related to the level of government spending on culture. In order to establish this relationship data on museums must be complemented with data on government spending. Over the past 30 years statisticians and other experts have been working to establish a common framework to collect and compare data on public cultural expenditure in the context of UNESCO, the Council of Europe and OECD. Once again the European Union Leadership Groups (LEG) of Eurostat played an important role and currently ESS-Net is gathering data on funding.

ERICarts, the European Research Institute for Comparative Cultural Policy and the Arts provides information on comparative cultural policy research. Available data are disclosed in the Compendium of the Working Group on Cultural Statistics (http://www.culturalpolicies.net/web/statistics.php). The data are based mainly on official data from national and international/European sources. Just like EGMUS this project has to deal with difficulties concerning the quality and comparability of data. A previous publication on financing the arts and culture in the European Union has demonstrated that these problems are hard to overcome (Klamer et al. 2006).

The database of the Compendium provides information on government funding for 17 of the 25 countries that are presented in Figure 2. Of these 17 countries not every country had data on funding from the same year as the museum statistics. Therefore the most recent data on funding are used. Mostly these data are from 2007, but some are older. No data older than 2004 are used.

In order to control for the size of countries both the number of museums and the government expenditure on culture are based on 100.000 inhabitants. Figure 3 shows that especially Scandinavian countries spent relatively large amounts of euro's on culture. On the other hand the expenditure in East European countries such as Romania, Poland and Hungary, South European countries such as Spain and Portugal as well as in Germany is relatively low.

It may come to some surprise, but the level of funding is not related at all to the number of museums. Figure 3 shows an almost vertical trend line with an explained variance of .00. Whether the expenditure of governments per 100.000 inhabitant is low or high, the number of museums per 100.000 inhabitants is not affected.

This conclusion is based on the total expenditure of the government, including the central government, provinces or regions and municipalities. If only the spending of the central government is taken into account, the conclusion remains the same (R^2= .00).

An explanation of this somewhat puzzling finding is not easy to give. It could be possible that different countries have different priorities within their cultural policy where some countries support cultural heritage strongly where others prefer spending relatively high amount on the arts. In this way there could still be a relationship between funding and the number of museums. Another though could be that the majority of the expenditure on culture is consumed by a minority of museum. May be here also the 20/80 rule applies, which means that 20 percent of the museums uses 80% of the funding. The variation between countries in the number of museum regards primarily these museums, for which other factors account than the expenditure.

Figure 3 Number of museums per 100.000 inhabitant, by country and government expenditure on culture (in EUR) per 100.000 inhabitants
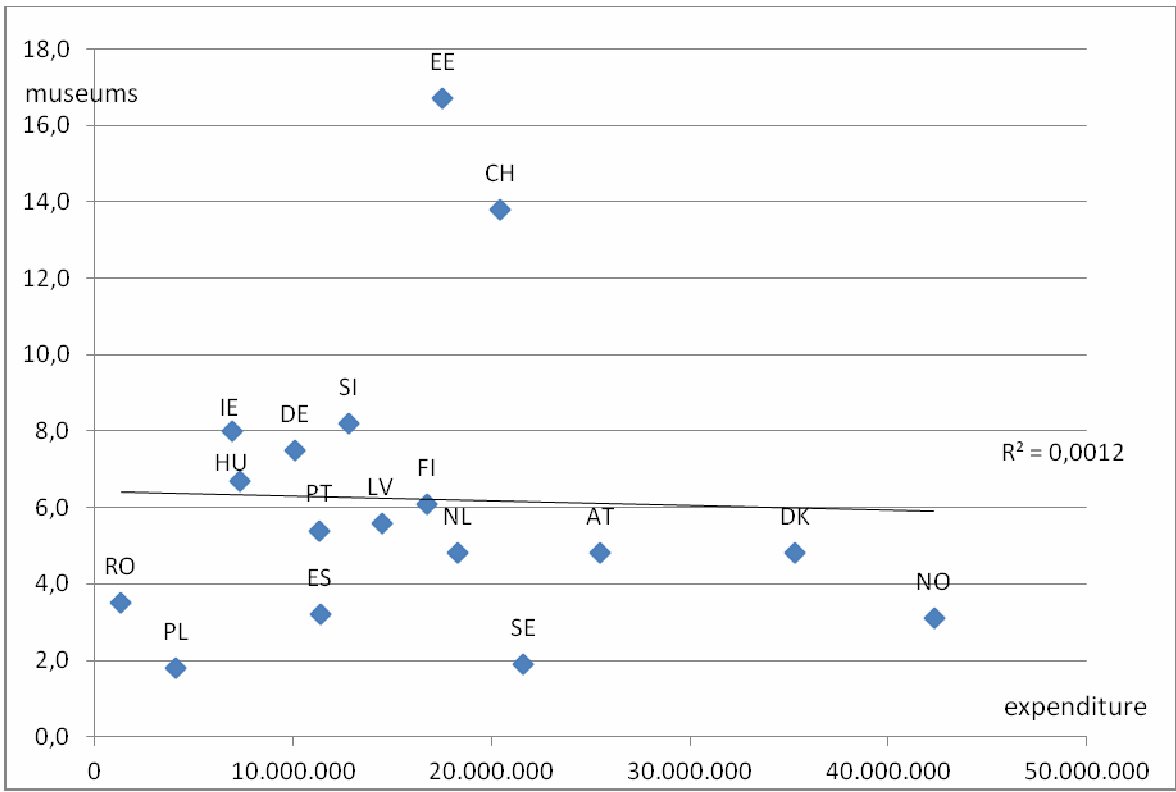

How many visits?

For the same set of 25 countries the number of museum visits are analysed. It is obvious once again that in larger countries there are in general more visits to museums. Figure 4 shows the relationship between the number of museum visits in a country and the number of inhabitants. Again for matters of presentation Germany is not included in this figure.
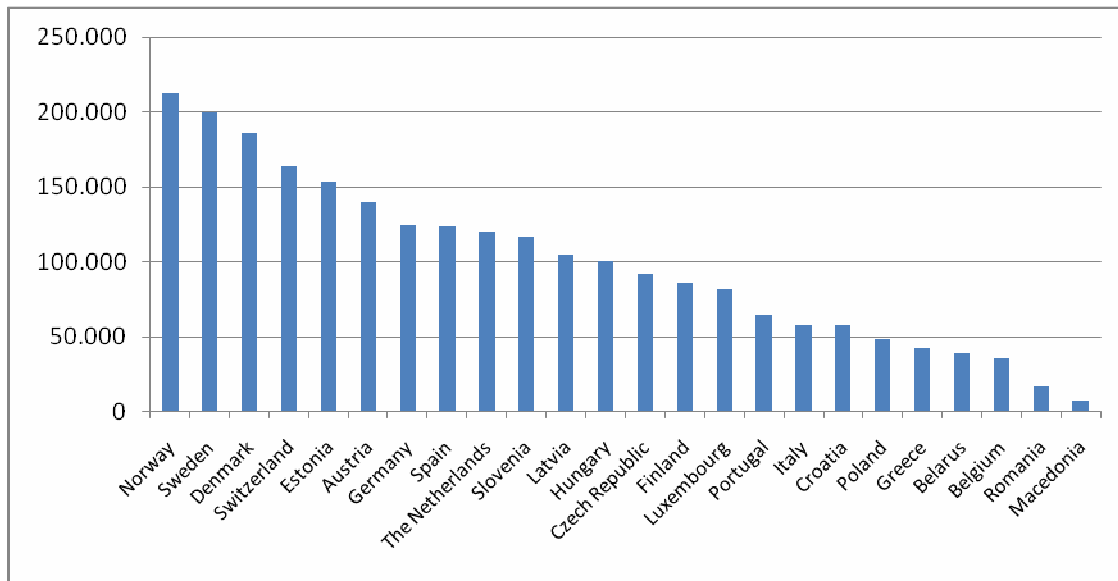
Also the relationship between the number of museum visits and the number of inhabitants is quite strong. The trend line in Figure 4 has an high explained variance of .66 (a correlation of .81). When Germany is added to the analyses this relationship is even stronger with an explained variance of 82. (corr.: .90).
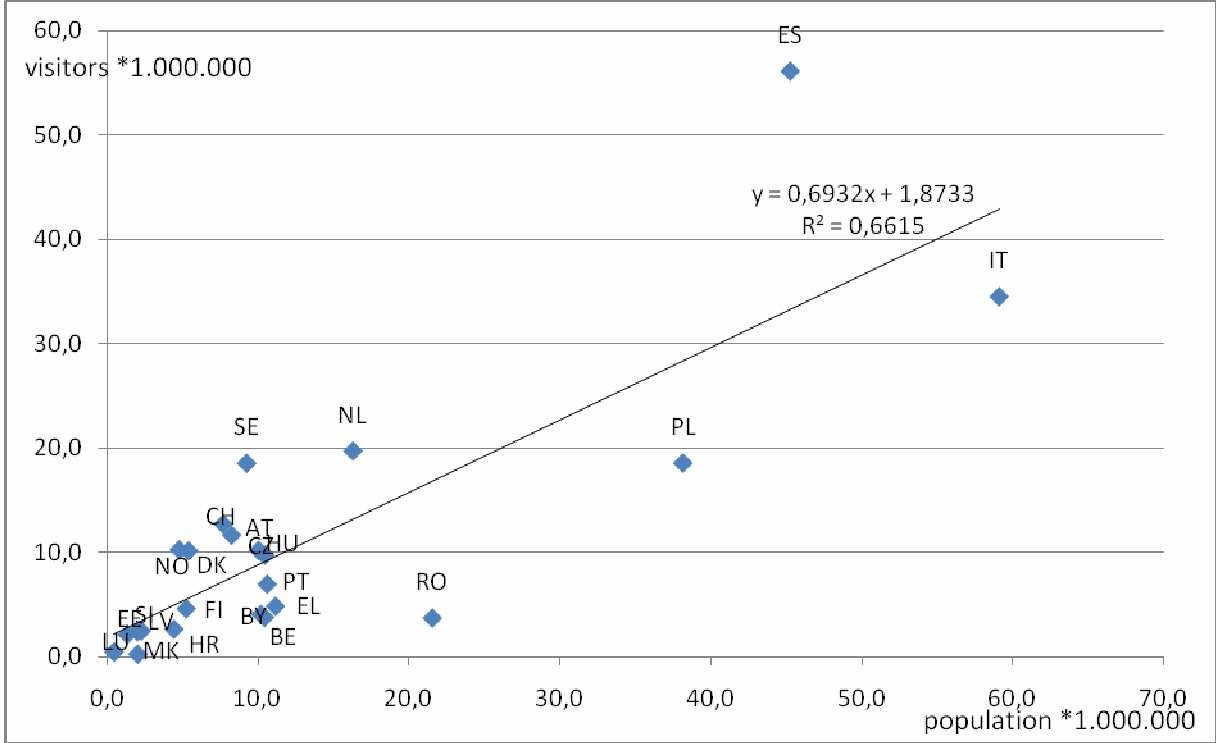
Presenting the number of museum visits per 100.000 inhabitants shows that people in Scandinavian countries (except Finland) go to a museum more often than elsewhere in Europe (Figure 5). The number of museum visits is lowest in Belarus, Belgium, Romania and Macedonia.

Figure 5 Number of museum visits per 100.000 inhabitants, by country


Countries with a low number of museum visits per 100.000 inhabitants are also the countries with a low number of museums. Figure 6 shows to what extent there is a relationship between these numbers: R^2=.17 (corr = .41). The number of visits in Sweden, Norway and Denmark is much higher than might have been expected based in the number of museums.

Figure 6 Number of museum visits per 100.000 inhabitants by country and number of museums per 100.000 inhabitants
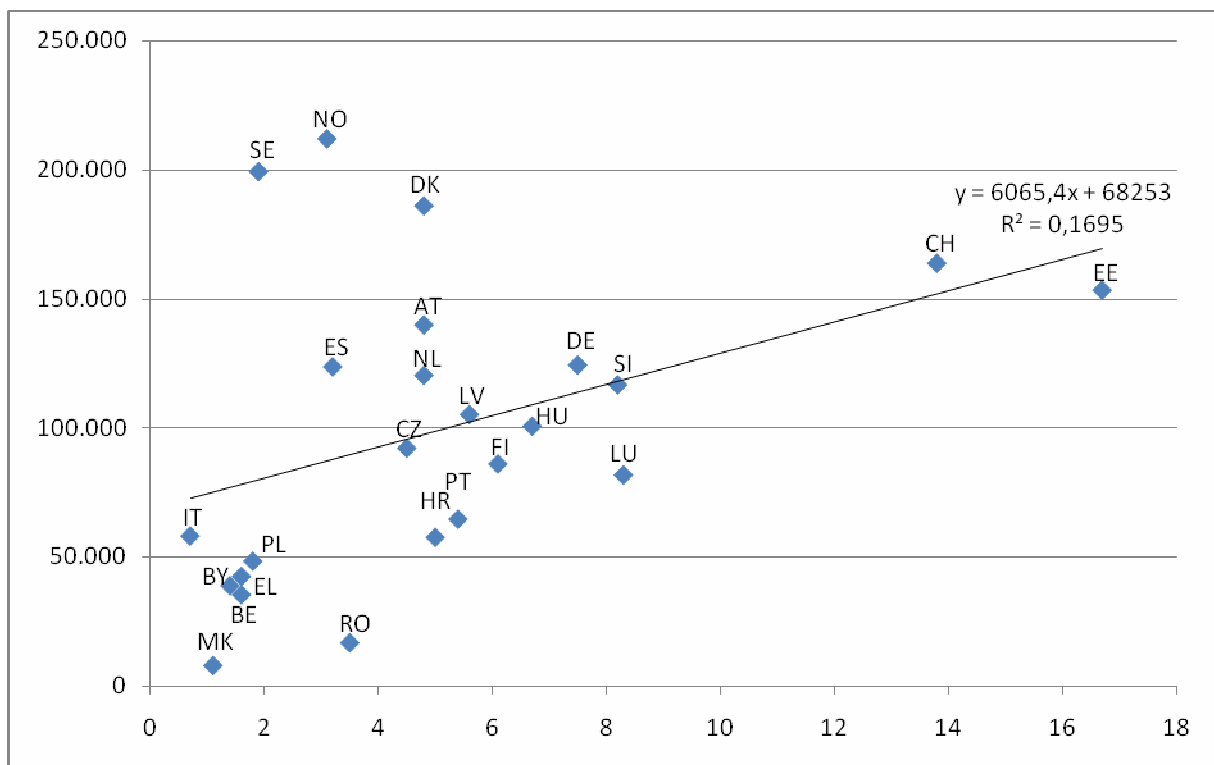
Not all the visits to museums in a certain country are performed by the inhabitants of this country. There are also foreign tourist who visit these museums. Often there are great difficulties in distinguishing the visits of the indigenous population and these tourists. Yet, it easy to imagine that some countries such as Italy, France or the Netherlands with some museums as major tourist attractions may receive a higher share of foreign visitors. From ten countries the EGMUS database contains information on the percentage of visits by foreign tourists. From these countries Luxembourg shows to be the country with the highest number of tourists, followed by the Netherlands and Estonia (Figure 7). Not to doubt the quality of museums in Luxemburg, the balance between the population size and the number of tourists may influence their high share of tourist. On the other hand Czech Republic and Belarus are welcoming few tourists in their museums.

Figure 7 Percentage of museum visits of foreign tourists
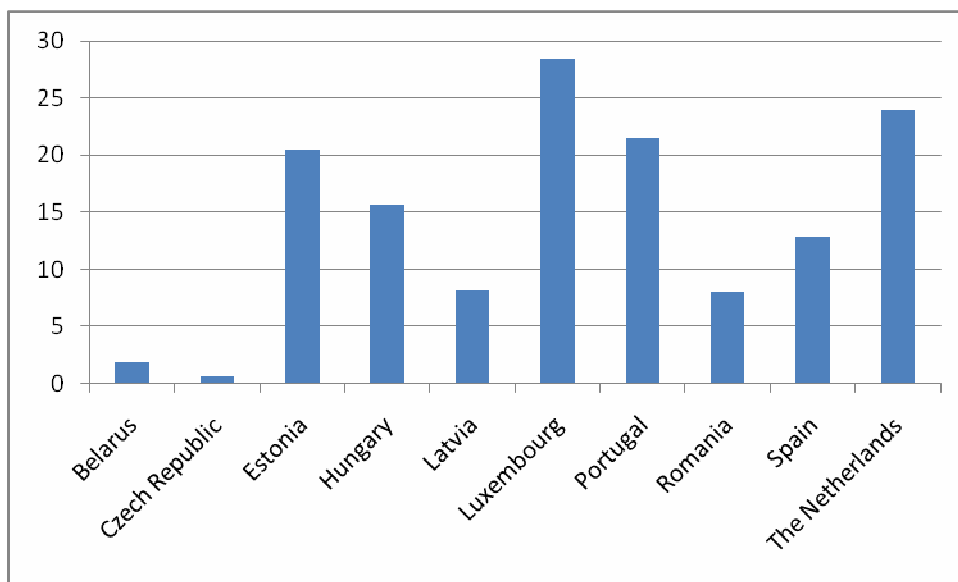
An alternative way to get a picture of the museum visits in a country is the population survey. In these surveys a sample of the inhabitant is asked whether they have visited a museum in the last 12 months (sometimes another time period is mentioned). This excludes the tourists, but brings another difficulty: the visits can also regard museums outside the country where they live.
The EGMUS-database contains information from population survey of 16 countries. Figure 8 shows that there is a very strong relationship between the number of museum visits per 100.000 inhabitant and the percentage of the population that indicates they have visited a museum in the past 12 months (R^2=.79; corr.: .89). One may conclude that both indicators present nearly the same information about museum visiting.
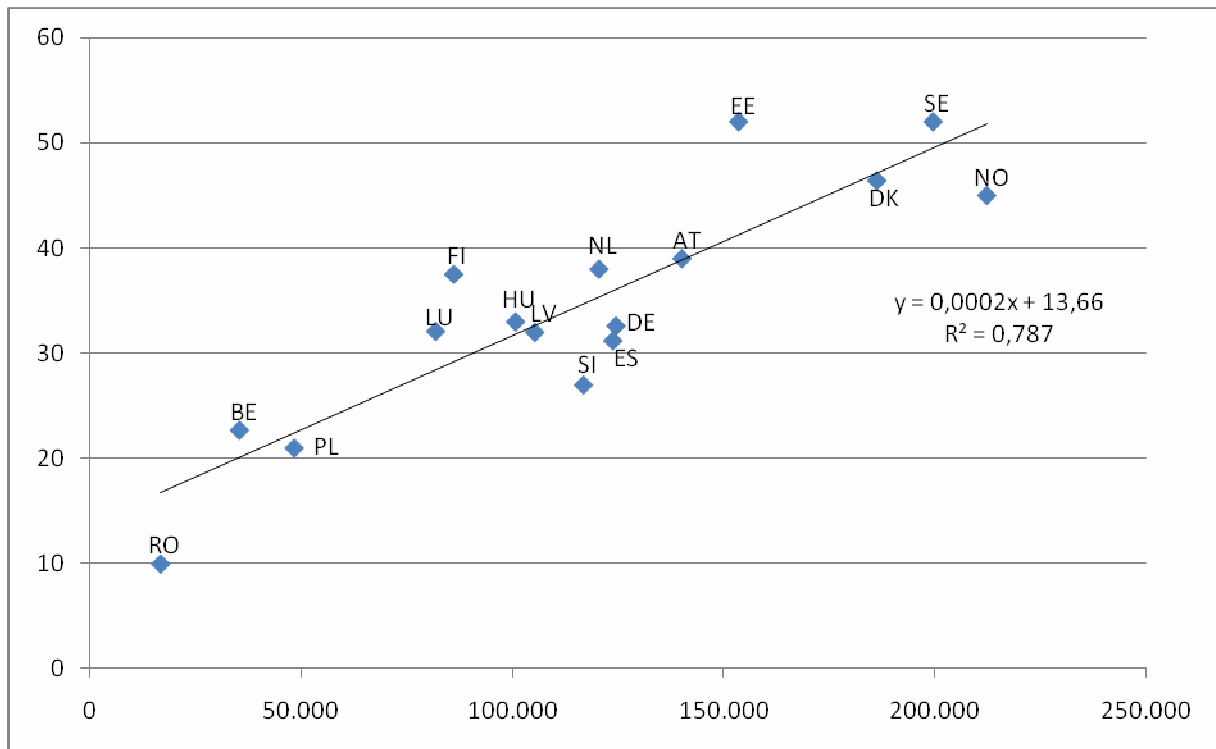
Is the level of museum visits influenced by the expenditure on culture within countries? This relationship is explored again through a combination of the EGMUS data with those on expenditure from the ERICarts' Compendium. The size of countries is controlled for by using the number of museums and the government expenditure per 100.000 inhabitants. However, this does not correct for the possible influence of the differences in the amount of incoming tourists. Given these restrictions Figure 9 shows that the level of funding is strongly related to the number of museum visits. The trend line has a very high explained variance of .72. (corr = .85). A generous expenditure of governments coincides with a culturally active population, at least as far as visiting museums is concerned.
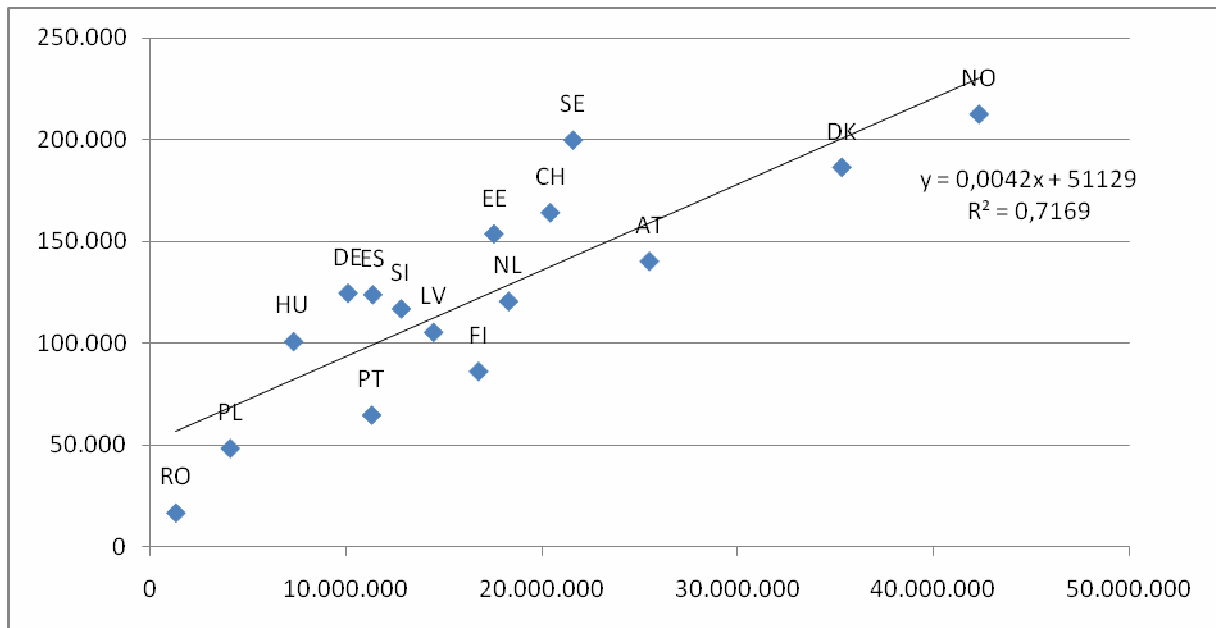
Digitisation

In recent years the diffusion of internet access among European populations and the digitisation of cultural heritage material has opened up new avenues for presentation of heritage material and participation of the public. Many museum have connected to the web and spent many efforts on digitizing their material. First, this digitisation process was mainly aiming at internal registration. But the obvious opportunity of reaching a broader audience persuaded many museums to present (parts of) their collection to visitors at a distance. Especially the idea of reaching younger people appeals to museum directors and educational staff. The young are generally seen as the heavy users of these new media and they are supposed to be the digital natives who can easily and successfully find their way on the internet. So why not use the power of new media to reach this highly desirable audience group? This appealing idea is counterbalanced by the fact that young people turn out not to be the capable information seekers we imagine them to be. And their interest lies often elsewhere than in the field of cultural heritage. The elderly on the other hand are often interested in historical topics and they are slowly finding their way to the internet. Besides these new opportunities some museum struggle with the idea of losing their physical audience to online participation. They expect that once the curiosity of webvisitors is satisfied they will not show up at the museum doors any more. Research does not indicate that this is indeed what is happening. Rather, the contrary might be true: reading and watching online content stimulates people to see the real thing.

The EGMUS database does not (yet) contain information on the use of museum websites or other forms of digital participation. The database does have information on the number of museums with internet access and a website. Further empirical measures for digitisation activities in the field of cultural heritage have been constructed within the Numeric project (2007-2009) (http://www.numeric.ws/) and building on Numeric the Enumerate Project (started February 2011) (http://enumerate.eu/). This work is commissioned by the European Commission and

supported by the Member States' Expert Group on Digitisation and Preservation and by EGMUS.

There are great differences between countries with regard to the digitisation within museums. Although only some basic indicators are taken into account, Figure 10 shows that in some countries (i.e. Greece Macedonia and Norway) all museum have internet access, while in others such as Finland, Spain, Portugal and Romania this holds only for a minority of countries.

Having a museum website is not always in line the presence of internet access. In Macedonia and Belarus (almost) all museums have internet access but relatively few have a website. In Spain more museums have a website than internet access. For other countries the presence of internet access and a website are more balanced.

Figure 10 Percentage of museums with internet and a website, latest year in 2004-2009 period
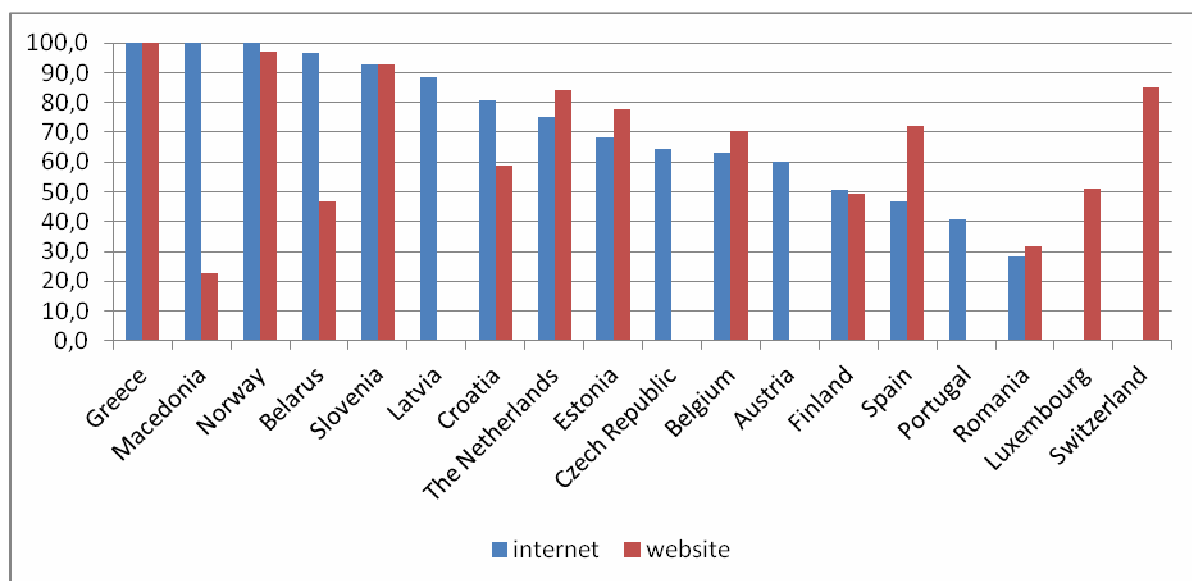
The digitisation of museums is a process with high speed. Figure 10 is based on the most recent data available in the period 2004-2009. Yet it makes a huge difference if the number refers to 2004 or 2009. Compared to this development the number of museum, their visits and the expenditure on culture must be very stable. Based on all information in these six years the change in internet access of museums can be presented. Figure 11shows that internet access has increased from a trend line average of 50% in 2004 to almost 80% in 2009. There is a wide distribution around the mean in each year, so the explained variance is not very high ($R^2 = 0,08$), although this is similar to a correlation .29 which would still be interpreted as reasonably strong. Anyway, there is an evident trend towards higher connectivity and the research agenda is open to new questions on digitisation activities of museums and digital participation of their audiences.

Figure 11 Percentage of museums with internet, 2004-2009
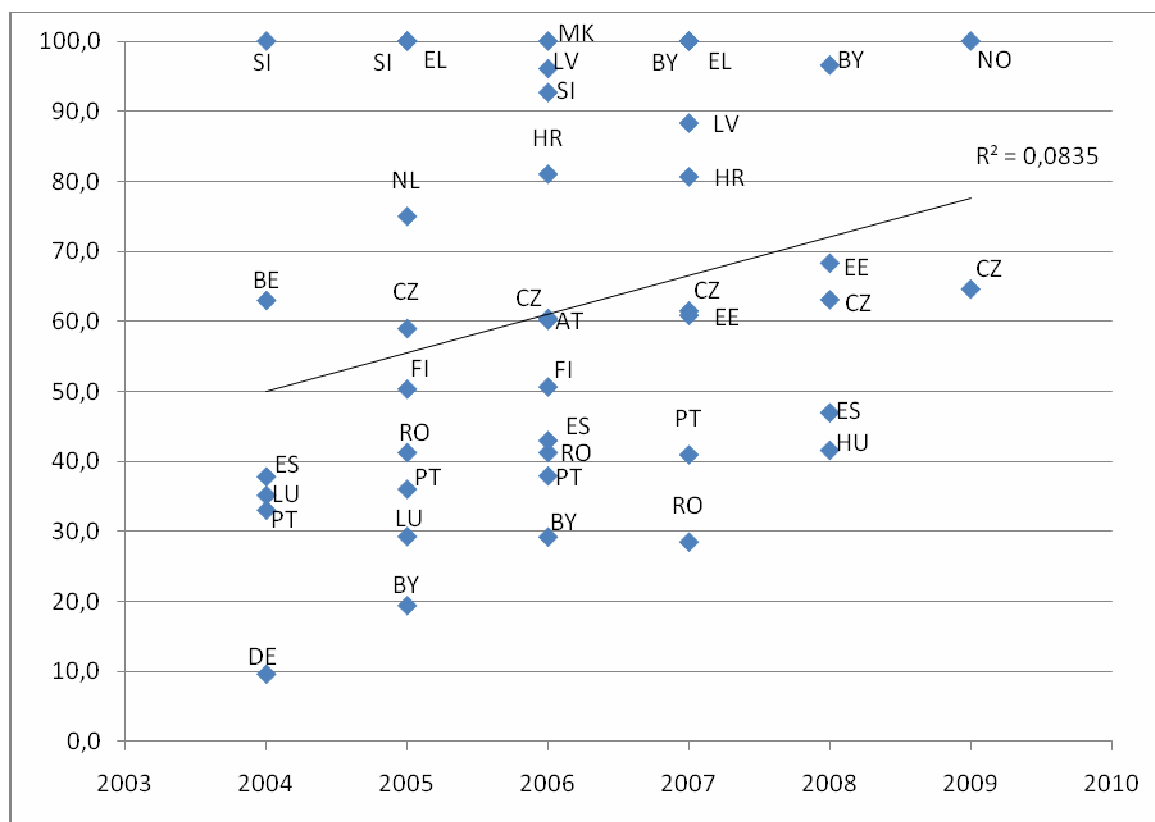
Museum statistics and cultural policy

European museums play an important role in showing the richness and diversity of cultures. The rapid changes in modern societies driven by major processes such as globalisation, migration and individualisation call for areas of reflection and identity formation. Museums are at the heart of these debates and must face the challenge of adapting to changing social, political and ecological environments. They construct stability by preserving the past and guarding the treasure of our cultures for future generations. They have this important role to play but mainly due to economic crisis and possibly also political populism this role is threatened. More than ever there is a call for the legitimacy of preserving the past and a search for effective ways to spent government funding.

Comparative research is becoming more and more important as a tool in the development of national and transnational policies and programmes. It provides information to visualise and understand current trends. By examining and comparing the policy efforts and their effects in different countries policy makers can make better informed judgements. Research can contribute to reducing uncertainties and complexities inherent in policy making.

A database on museum statistics should firstly contain up to date, accurate and comparable data on various aspects of museums. These data provide the opportunity to describe various aspects of museums at a certain moment in time for as many countries as possible. At present, not all European countries have collected data recently. Countries who collected data did not all gather information on every museum indicator of the ALOKMI scheme. Furthermore, for every indicator there should be a common understanding and a similar approach to data collection. These efforts of harmonization lie at the heart of EGMUS and need to be continued. Filling the gaps in de data infrastructure and harmonizing the data should remain the first priority of EGMUS.

One lesson learned from the exercises in this paper is that the enrichment of data can contribute to a deeper understanding. Here the focus was on one central aspect of cultural policy: the expenditure on culture. In order to answer questions on why there is so much variation between countries also information on explanatory factors is needed. These factors can be financial, but also geographical (f.e. average distance to museums), social (f.e. social inequality within countries), temporal (f.e. amount of leisure time) or cultural (f.e. individualistic or collectivistic). The analysis of these relationships can shed light on differences between countries in the museum statistics. It would also show which instruments of cultural policy are most effective.

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