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Museum finances: challenges beyond economic crises

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Museum finances: challenges beyond economic crises

Economic crises affect museums financially both directly and indirectly. But museum finances constitute a complex structure that is affected to a large extent by political decisions, legal frameworks and individual preferences. This article maps museum revenue and analyses how vulnerable income types are to fluctuations in the economic cycle. The study is based on secondary sources in the form of published research. A conclusion is that most museum revenue types are not particularly vulnerable to such fluctuations. There are structural challenges for financial management of museums beyond economic crises, and these are linked to long-term strategic decisions of museums regarding stakeholder relationships.

Keywords: governance; museum funding; management; stakeholder; financial strategies

The financial crisis spreading across the globe since 2008 has had severe effects on household economies, companies within the financial and other sectors, and the economics of nations and regions. How has the economic crisis affected the financial wellbeing of museums? This will be investigated in this article, with the help of a stakeholder model. This article critically analyses the dependence of various museum income types on fluctuations in the economic cycle.

Economic crises affect museums financially both directly and indirectly. Museums may face allocation reductions due to cuts in expenses to the arts and culture within government. In addition, museums may face reductions in income originating in the private sector, due to diminished liquid resources for sponsorship and direct support of culture from individuals and companies. As to date, there have not been studies of how the economic crisis has affected the museum sector. Recognising this research shortfall, this article summarises research on museum finances, and calls for further empirical studies. The argument put forward is that in contrast to individuals and business, museums as a sector are only marginally affected
by economic crises. However, there are other and more concerning structural
dependencies that generate financial problems for museums.

The contribution of this article to the field of museum management research is
the identification of economic crises and the economic cycle as minor factors
affecting financial management. Another is the recognitions of increasing stakeholder
demands on museums, which affect finances.

The structure of the article is as follows. After the introduction, the structure
and dynamics of museum finances are mapped. The broader context of museums is
also discussed, with emphasis on elements impacting on museum finances. The
following section the dependence of various income types on the economic cycle is
analysed. Following on that, previous research on financial structure and economic
vulnerability of museums, cultural organisations and nonprofits is summarised.
Finally, conclusions are drawn regarding the financial challenges of museums are
summarized, and relevant further studies are proposed.

The structure of museum finances: income

In order to be able to discuss museum finances and financial challenges, including
those relating to the economic cycle, the overall financial structure of museums needs
to be spelled out. As formal organisations, museums can broadly be divided into
private and public, and furthermore into forprofit and nonprofit within the private
sector. Museums base their activities on a mix of income (Martin 1994; Hutter 1998),
including earned income and public or private contributions (Schuster 1998; Fedele
and Santoni 2006). The main income types are allocations, earned income, public or
private grants, donations, sponsorship, lottery revenue, and endowment funds
(Toepler and Dewees 2005). As earned income may be mentioned ticket sales and
entrance fees, museum shop sales, restaurant and café sales, licenses, and rental and deposition fees. (1)

Tax deduction or tax relief regulations for donations and sponsorship, as does the levels of indirect and direct public support to the sector vary significantly across countries (Hughes and Luksetich 1999; Schuster 1999; Leclair and Gordon 2000; Negussie 2006; McIsaac 2007; Hughes and Luksetich 2008; Rushton 2008). Overall public and private support to the museum sector has increased in the last decades, apart from a period in the early 1990s (Bises and Padovano 2004; Bodo and Spada 2004; Selwood 2001; Månsson 2008), and it is clear that both reductions in support to the sector as well as increases are politically guided (Moen 1997).

Deaccessioning, or sales of assets, is a further option for museums to generate revenue. However, this is a controversial issue, and in many European public museums, there is no possibility of deaccession (Montias 1973/1995; O’Hagan 1998). Donor conditions may also restrict deaccessioning.

Financial balance

The financial standing of a museum depends on the balance between income and expenses, but the relationship between income and corresponding costs is far from straightforward (Johnson and Thomas 1998; Camarero and Garrido 2008). The complexity of museum finances is illustrated by the intricate relationship between earned income from foremost entrance fees, and general levels of public support (Steiner 1997; Darnell 1998; Prieto-Rodríguez and Fernández-Blanco 2006; Peacock and Rizzo 2008). The level of entrance fees are sometimes regulated by public principals, and sometimes prohibited.

Museum expenses contain three major posts: personnel, facilities and assets, and activities, of which the last one is usually smaller than the other two. The costs
and expenses of museums are often linked to the material assets in the form of collections, and tend to increase with time, including costs for conservation and preservation. The increasing public support to European museums in the last decades correlates with an increase in costs for facilities and security in the same time period (Babbidge 2000; Lindqvist 2007). Overall, governments and other funders today demand more access to museum services for the public, as a condition for support. Increased accessibility often entail high initial investment and running costs, and museum activities have high demands on qualitative and educational aspects, these measures far from secure a stronger financial standing. The costs for museum activities are not fully covered by entrance fees. This dilemma has been solved on a long-term basis either through the creation of an endowment, or through publicly secured allocations (Martin 1994).

[FIGURE 1]

In addition to internal factors, external factor that affects the finances of museums. There relate to various stakeholders, and the central relationships of museum finances are illustrated in figure 1. Other details are listed in table 1 below. Competition, the number of museums on a particular market, is one external factor. An increasing number of cultural organisations means increasing competition for funds, unless private and public expenditure on this kind of institutions increase at the same rate (Morris 2007). Also the more frequent choices to protect cultural heritage of various kinds, makes various kinds of physical assets in a country or region compete for funding. Another external factor is the focus of politicians and donors in establishing museums rather than supporting ongoing museum activities. Both donors and politicians seem to prefer support of the construction of a museum building than running costs. The financial challenges of museums do not solely relate to
fluctuations in the economy, but also, evidently, to the psychology of political action and private support to culture and the arts.

Bureaucratic regulations may also affect museum financial management. The impossibility for public authority museums to ‘roll over’ a surplus from one fiscal year to the next, for example, makes long-term balancing of finances difficult (Lindqvist 2007). Furthermore, frequent change of principals, such as board members or governing politicians has proved sometimes to have a negative effect on long-term governance of museums, as individual politicians and board members have differing views on the purpose and objectives of even individual museums. The wish of individual politicians or board members to make their mark on museum policy may cause inconsistency in museum governance.

**Museum finances and the economic cycle**

Research on museum funding and economic vulnerability has been primarily investigated with the aim of finding optimal funding mixes. There are also numerous handbooks on museum fundraising, which focus on the possibilities of individual museums to develop their financial mix and maximise revenue. Whereas the impact of an economic crisis can be clearly measured by unemployment, GNP and business activity statistics, it can be difficult to understand how museums individually and as a sector are affected by an economic crisis.

An important question in this context is if the economic cycle affects museum finances over and beyond funding based on stakeholder relationships, or within these frames. Factors that impact on the finances of a museum, it has been shown, may or may not be linked to the economic cycle (Börsch-Supan 1993; Frey and Meier 2006; Skinner et al. 2009). The stockmarket and the business sphere as such are not stakeholders of museums, but affect their finances. Many of the stakeholders of
museums, however, act on or affect the stockmarket, and especially the revenues or losses of individuals and organisations on investments in stock impact on liquid resources available for direct and indirect support of museums.

Both according to a resource based and an institutional perspective on organisations, museums as institutions need to respond to the demands of various stakeholder groups, in order to secure support and legitimacy (Bigelow et al. 1996; Christensen and Mohr 2003; Friedman 2007; LeRoux 2009).

Allocations are to a certain extent dependent on the economic cycle, as tax income tend to decrease in times of economic recession, and increase in times of economic boom, but politicians ultimately decide on which areas to prioritize in the budget process annually. Governments may also stabilize their tax revenue by diversifying their tax base, and so make it less vulnerable to changes in the economy. Getzner (2002) in a study of public expenditure on culture in the last decades, notes that political decisions affect the cultural sector as much or even more than variations in the economic cycle. Of earned income streams, only a smaller part is directly affected by changes in the economic cycle. Donations furthermore are often done with capital or assets generated over a longer time period, and is seldom based on short term economic considerations. Sponsorship is the only type of income that directly is dependent on changes in the economic cycle. Sponsorship is generally a short-term engagement from companies, even though cultural institutions try to interest companies for longer-term engagements (Alexander 1996; Frey 1998; Lindqvist 2003, 2008). Endowment investments often based on stock-market products generate revenues for museums and tend like direct market engagement to fluctuate with the economic cycle. However, in contrast to direct market engagement, the possibilities of distributing risk are largers with an endowment.
Grants based on endowments tend to be more directly dependent on the economic cycle than grants allocated through public bodies, as grants from the latter are generated from taxes rather than stock-market investments. In general, the conditions for grants are central for the possibilities to receive grants from both private and public bodies, and at least research grants are sought in tough competition. A conclusion is that the general activities of a museum a particular year have a larger impact on their abilities to receive grants than the economic cycle.

Lottery revenue correlation with fluctuations in the economy has not been researched. However, lottery revenue tends to be a type of income that is not closely related to the economic cycle. The decisions on how to distribute lottery revenue is linked foremost to the priorities of lottery revenue distributing bodies.

**Museum stakeholders and their influence on museum finances**

Most management researchers, whether of forprofit or nonprofit organisations, agree on the necessity of organisations to act according to stakeholder interest in order to be sustainable (Pfeffer and Salancik 1978; Freeman 1984, 2002; Oliver 1991; Fassin 2009). Stakeholders of museums, defined as groups and actors that influence or depend on the decisions of museums, include owners, governments, grant givers, visitors/customers, the general public, donors, friend associations, sponsors, and providers of services and goods used by the museum (Ott 2001, Independent Sector 2002; Thomas and Poister 2009). Stakeholder groups impact in varying degree to the total income of a museum (Speckbacher 2008; Yan et al. 2009; Hsieh 2010).

Governments and public bodies that distribute economic support to museums base their decisions on political priorities but also on the economic status of public finances and the competition from other fields of politics on public resources. Visitors
and customers are evidently vital for museums, and earned income has become an increasingly important part of museum finances (Griffin and Abraham 1999; Trupiano 2005; Bowitz and Ibenholt 2009; Camarero and Garrido 2009; Chang and Tuckman 1994; Prieto-Rodríguez and Fernández-Blanco 2006). Donors are important for museums in particular in a long term perspective, but their behaviours or preferences are difficult to predict. The attractiveness of donation to a museum depends on many factors, such as tax regulations, household income levels, and personal interests (Brooks 2007; Smith 2007; Hughes and Luksetich 2008). Friends associations and volunteers are important stakeholders and resources for museums, as they specifically work for the promotion and benefit of the museum of which they are friends. They contribute economically to museums by raising funds for acquisitions, and may also be an important link for larger donations. They also actively market the museum, and thus have an impact on visitor numbers and also on volunteer activities, even though they do not generate direct revenue for the museum.

Endowment founders and boards, and grant-giving bodies are important museum stakeholders that contribute to museum finances with money generally invested in the stockmarket or other commercial activities. The public is a stakeholder group that has only indirect economic impact on museums. The public is important for the legitimacy of museums, and may react to perceived illegitimate behaviour of museums (Bandelli et al. 2009).

In countries like Italy and the UK lottery revenue has had significant economic effects on the museum sector, and lottery revenue distribution boards have become important stakeholders of museums (Creigh-Tyte and Gallimore 2000; Bodo and Spada 2004; Selwood and Davies 2004; Trupiano 2005).

TABLE 1

9
Research on economic vulnerability in the nonprofit sector

Several researchers have studied financial portfolios and vulnerability in the nonprofit sector, and suggested ways in which nonprofit organisations can make their finances more stable (Krug and Weinberg 2004). Only few, however, have specifically investigated the impact of changes in the economic cycle on museum or nonprofit organisations (Börsch-Supan 1993; Skinner et al. 2009). Museum researchers, however, in general acknowledge the complexity of the sector’s finances than do nonprofit sector researchers (Frey and Meier 2006).

Chang and Tuckman (1991) identify four factors that contribute to financial vulnerability of nonprofit organisations. These factors are

a) inadequate equity balances
b) revenue concentration
c) low administrative costs, and
d) low or negative operating margins.

Even though Chang and Tuckman analysed nonprofit organisations in the USA, several of the factors they identify as important for sound museum finances are applicable to museums in countries with more substantial public support of museums. However, there is a significant difference between museums that receive public allocations and museums with a private endowment. The former group of museums is not allowed to generate a surplus in their activities that are based on allocations. This means that the structure of costs for museums operating as public bodies cannot use operating margins as financial stabiliser as can private museums. Again, there are national and regional differences as regards the specific limitations of public museums, but formal economic and organisational independence does not mean
similar conditions of financial management as those of private nonprofit museums. What is significant in this context is that Chang and Tuckman do not specifically mention changes of the economy when discussing factors influencing financial vulnerability.

In line with Chang and Tuckman, Carroll and Stater (2008) have shown that revenue diversification does increase financial stability, although with diminishing margins, among nonprofit organisations.

Froelich (1999) makes a profound analysis of three major types of funding of nonprofit organisations. The main types of nonprofit revenue stream that Froelich identifies are private contributions, corporate contributions (donations), foundation grants, government support, and finally commercial activities related or unrelated to the organisational mission. Froelich finds the highest levels of volatility in individual contributions to nonprofit organisations over time. The economic cycle as such, thus, is not identified as a major source of revenue volatility. Froelich comes to the same result as other researchers, namely that income diversification increases the financial stability of nonprofit organisations. But she also recognises the managerial sacrifices for this stability, potential mission vagueness, even goal displacement, performance indicators, and blurring of distinctions between nonprofit and other sectors. All these elements may affect long-term organisational legitimacy among stakeholders.

A sample of research on financial management of museums, cultural organisations, and nonprofit organisations is presented in table 2. It is not possible to concisely summarise this research, as research objectives differ according to disciplinary affiliation. However, it shows that the financial challenges of this sector are connected to long-term strategies by various actors, including musuems and nonprofit organisations themselves, rather than to the economic cycle.
Palmer (1996) identifies a number of financial cutback strategies of arts and cultural organisations in Australia:

- cost reductions
- political lobbyism
- cooperation among cultural organisations
- downsizing
- debt refinancing
- commercialization, and
- relocation.

Palmer’s study focuses on short-term responses to situations of immediate income decreases. Out of Palmer’s suggested strategies, only a handful are available to museums acting in the public sphere. Those are the strategies of cost reduction, political lobbyism, cooperation, and downsizing.

Cost reduction is perhaps the most evident way to come to terms with shortage of financial resources. Museums reduce or rationalise services as a result of reductions in income. However, the political demand for more formal control of agencies has meant that a redistribution of personnel resources takes place inside museums towards controlling and reporting (Lindqvist 2007). Political lobbyism is perhaps the strongest strategic tool that a museum management possesses, but it is a long-term strategy and is sensitive to changes in political priorities. Cooperation is sometimes suggested from political or administrative quarters as a solution to economic difficulties in the cultural sector. Finally, downsizing is a strategy that is risky in a long-term perspective, debt refinancing is only open to a few museums, and
relocation is seldom realistic due to tailored facilities et cetera, and commercialization is possible only to a limited extent.

**Financial management of museums**

For researchers investigating nonprofit financial challenges, the economic cycle as such is not a main concern when discussing nonprofit financial challenges. More important is the acknowledgement of each organisation’s resource dependencies, and development of strategies to meet those dependencies, as described by resource dependence theory (Pfeffer and Salancik 1978).

According to stakeholder theory (Freeman 1984; Stieb 2009), stakeholders should gain from the action of an individual organisation (company) in the form of direct benefits and in the form of decision-making power. Demands on museums from stakeholders have evidently increased in the last decades. Museums today need to communicate the benefits of their existence clearly, and stakeholders demand to much more directly influence museum activities, such as exhibition communication and educational programmes (Zimmer and Toepler 1999; Wirtz 2000; Moynihan 2006; Fedeli and Santoni 2006; Bandelli et al. 2009; Davies 2010). This trend corresponds with increasing demands on public organisations in general to be resource efficient, effective, and transparent, something which paradoxically has resulted in more complex governance structures, organisation, and management conditions (Schuster 1998; Moss 2002; Wilson and Boyle 2004; Christensen and Laegreid 2007; Zan 2000; Zorloni 2010; Lindqvist 2012). This means also that action taken to improve legitimacy thus may have a stronger impact on a museum’s financial situation than the economic cycle.
Conclusions

The economic crisis of the late 2000s has had many negative impacts on the lives of people. For museums, the economic crisis has meant more serious consequences for organisations depending directly on corporate support and individual support. Economies are intricate networks and flows of capital and resources that evolve cyclically, even though some slumps and some booms are stronger than others. Even though the political economy fluctuates with changes in the economic cycle, its resources are distributed according to political preferences rather than on purely economic considerations. The financial challenges of the museum sector are related more to structural, political, issues than to the economic cycle, which means that strategic financial management work can help reduce the vulnerability relating to fluctuations of the economic cycle.

Museums are exhorted to become more financially self-reliant by governments, but the societal identity and function of museums is not based on economic considerations. Museums today are increasingly demanded to account for their relevance, effectiveness and efficiency by more stakeholder groups (Barman 2007). Museums respond to these demands in order to strengthen and secure legitimacy and long-term funding, both as individual organisations and as a sector. This is the other side of the economic balance of museums; clearer identification of stakeholder benefits certainly generate increased long-term support. Contingency valuation studies support this assumption (Hansen 1997).

At the same time, macro-level developments in the museum sector potentially counteract these efforts of museums. Such developments include increased competition among museums due to an increase in the total number of museums. The qualitative ambitions and activities of museums furthermore generally seek to achieve
goals far beyond the financial realities of individual museums and the sector as a whole. In addition, increasing security costs, and preferences of donors to finance capital investments rather than operational expenses, and public sector restrictions on financial planning, all affect the economic balance of museums, without direct reference to the economic cycle. On the other hand, museum attendance figures are more dependent on entrance fees and the level of interest for individual exhibitions or exhibits, than on the economic cycle.

To summarise, the complexity of museum financial management relate to the numerous objectives and demands on their activities, and to the revenue streams that do not follow forprofit revenue models. This means that it is not always possible for museums to reduce or change their activities if revenues soar, as they have obligations towards principals and other stakeholders. Furthermore, fixed costs are high, and only partially related to the number of visitors. The more specific stakeholder demands are, more museums are limited in their managerial autonomy. These characteristics of museum financial management are in no or only to a very limited degree related to fluctuations in the economic cycle. The financial management of museums face more severe long-term challenges.

Apart from internal factors of complexity, external factors of complexity of the museum sector are:

- increased competition due to a growing number of museums
- lower levels of public subsidy to heritage
- changing political priorities
- high interest in establishing new museums by donors and politicians

Paradoxically, the interest for museums is higher than ever, but this does not make the museum sector in general more wealthy and stable. Even though the
negative effects of the recent economic crisis does not affect the museum sector to any significant extent seen as a collective, the financial challenges of the sector remain reason for concern.

Stakeholder management, then, becomes much more central to the long-term financial management of museums than preparations for an economic crisis, even though an economic crisis certainly affects short-term funding. Long-term stakeholder management makes the museum sector less vulnerable in times of economic crisis.

**Suggestions for further research**

This article has shown that there is no research on the effects of the latest economic crisis on individual museums or on museums as a sector. Empirical studies of the effects of the economic crisis on individual museums or the museum sector in individual countries are called for as a way to learn more about the financial vulnerabilities of museums across the globe. Furthermore, time series studies of the number of museums in a country would be important to understand the evolving competition that effects the museum sector. Data allowing comparisons would be very interesting for knowledge of and strategic management of museums.

**Acknowledgements**

I wish to thank the editor and three anonymous reviewers of the Museum Management and Curatorship journal of their constructive and insightful remarks and recommendations on a previous version on this article, and my colleagues … for comments on and suggestions for the work in progress.
Notes

1. The nonprofit revenue categories of Form 990, the USA Internal Revenue Service tax form, contain the following revenue types (Chang and Tuckman 1994):

- direct public support
- indirect public support
- government grants
- programme service revenue
- membership dues
- interest, dividends, and net rental income
- sale of assets
- special fund-raising and net sales of goods
- revenue from all other sources

Attention should be paid to the broader range of organisations that fit under the category of nonprofit organisations than museums.

References


Table 1. Types and sources of museum income.

<table>
<thead>
<tr>
<th>Income type</th>
<th>Main stakeholder</th>
<th>Source of funding</th>
<th>Level of sensitivity to economic cycle</th>
</tr>
</thead>
<tbody>
<tr>
<td>allocations</td>
<td>government, public tax</td>
<td>tax transfer</td>
<td>low</td>
</tr>
<tr>
<td>donations</td>
<td>donor private</td>
<td>private</td>
<td>low</td>
</tr>
<tr>
<td>earned income</td>
<td>customers private</td>
<td>low/medium</td>
<td>low</td>
</tr>
<tr>
<td>endowment revenue</td>
<td>endowment board private</td>
<td>high</td>
<td>low/medium</td>
</tr>
<tr>
<td>grants</td>
<td>public and private grant givers tax transfer, donations low/high</td>
<td></td>
<td></td>
</tr>
<tr>
<td>lottery revenue</td>
<td>distribution board private + transfer low</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sponsorship</td>
<td>sponsors private</td>
<td>high</td>
<td>high</td>
</tr>
<tr>
<td>support resources</td>
<td>friend associations private</td>
<td>low</td>
<td></td>
</tr>
<tr>
<td>(monetary + other)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 2. A sample of empirical studies broadly relating to funding structures of the museum, cultural, or nonprofit sectors.

<table>
<thead>
<tr>
<th>Author, year, title, journal</th>
<th>Studied sector</th>
<th>Type of data</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bises and Padovano 2004</td>
<td>culture</td>
<td>financial data, case study</td>
<td>Italy</td>
</tr>
<tr>
<td>Bodo and Spada 2004</td>
<td>culture</td>
<td>multiple</td>
<td>Italy</td>
</tr>
<tr>
<td>Brooks 2007</td>
<td>charity</td>
<td>tax data</td>
<td>USA</td>
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<tr>
<td>Camarero and Garrido 2008</td>
<td>museum</td>
<td>quantitative</td>
<td>Spain</td>
</tr>
<tr>
<td>Creigh-Tyte and Gallimore 2000</td>
<td>culture</td>
<td>statistics, qualitative</td>
<td>UK</td>
</tr>
<tr>
<td>Fedeli and Santoni 2006</td>
<td>museum</td>
<td>ISTAT data</td>
<td>Italy</td>
</tr>
<tr>
<td>Getzner 2002</td>
<td>culture</td>
<td>statistics</td>
<td>Austria</td>
</tr>
<tr>
<td>Hughes Nold and Luksetich 1999</td>
<td>museum</td>
<td>quantitative sample</td>
<td>USA</td>
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<td>Hughes and Luksetich 2008</td>
<td>charity</td>
<td>quantitative sample</td>
<td>USA</td>
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<td>Leclair and Gordon 2000</td>
<td>culture</td>
<td>quantitative sample</td>
<td>USA</td>
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<tr>
<td>Martin 1994</td>
<td>museum</td>
<td>economic sector data</td>
<td>Canada</td>
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<td>McIsaac 2007</td>
<td>culture</td>
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<td>Moss 2002</td>
<td>culture</td>
<td>case study</td>
<td>UK</td>
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<td>Månsson 2008</td>
<td>culture</td>
<td>statistics</td>
<td>Sweden</td>
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<tr>
<td>Negussie 2006</td>
<td>heritage</td>
<td>case studies</td>
<td>Ireland, Sweden</td>
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<td>Roodhouse 1999</td>
<td>museum</td>
<td>case study</td>
<td>UK</td>
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<td>Roodhouse 2000</td>
<td>museum</td>
<td>case study</td>
<td>UK</td>
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<td>Schuster 1998</td>
<td>museum</td>
<td>sector statistics</td>
<td>USA</td>
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<td>Selwood 2001</td>
<td>culture</td>
<td>sector statistics</td>
<td>UK</td>
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<td>Selwood and Davies 2004</td>
<td>museum</td>
<td>sector statistics</td>
<td>UK</td>
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<tr>
<td>Skinner, Ekelund and Jackson 2009</td>
<td>art museum</td>
<td>multiple sources of statistics</td>
<td>USA</td>
</tr>
<tr>
<td>Smith 2007</td>
<td>performing arts</td>
<td>sector statistics</td>
<td>USA</td>
</tr>
<tr>
<td>Stanziola 2007</td>
<td>culture</td>
<td>Arts &amp; Business statistical data</td>
<td>UK</td>
</tr>
<tr>
<td>Steiner 1997</td>
<td>museum</td>
<td>case study, financial information</td>
<td>UK</td>
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<td>Taylor 1997</td>
<td>culture</td>
<td>case study, DNH financial data</td>
<td>UK</td>
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<tr>
<td>Toepler and Dewees 2005</td>
<td>culture</td>
<td>IRS and EC financial data</td>
<td>USA</td>
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<td>Towse 2001</td>
<td>opera</td>
<td>case study</td>
<td>UK</td>
</tr>
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<td>Trupiano 2005</td>
<td>culture</td>
<td>statistics, case study</td>
<td>Italy</td>
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<td>Wilson and Boyle 2004</td>
<td>museum</td>
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<td>Yan, Denison and Butler 2009</td>
<td>nonprofit</td>
<td>IRS financial data</td>
<td>USA</td>
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<tr>
<td>Zan 2000</td>
<td>museum</td>
<td>case study</td>
<td>UK</td>
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</tbody>
</table>
Figure 1. The relationships between museum income types and stakeholders.