The effects of media reputation on third-party funding of Swiss universities

Daniel Vogler
Research Center for the Public Sphere and Society, University of Zurich, Zurich, Switzerland

Abstract

Purpose – This study analyzed the effects of the visibility and evaluation of universities in news media coverage on the development of their private and public third-party funds.

Design/methodology/approach – The paper uses the concept of media reputation to investigate the effects of news media coverage on the outcome of funding decisions by firm managers and scientific experts. Extensive news media data from 2011 to 2017, collected with manual content analysis, were combined with economic data on Swiss universities.

Findings – The results show that a more positive evaluation in the news media leads to the positive development of private, but not public, third-party funding. Surprisingly, visibility in the news media has a negative effect on private third-party funding.

Research limitations/implications – The effects of media reputation are dependent on the stakeholders under review. However, this study’s design does not yield evidence on direct causal effects. Further studies could, therefore, use surveys to analyze the decision-making processes of individuals regarding their relative dependency on news media consumption.

Practical implications – This study demonstrates that positive evaluation in the news media represents an asset for universities when striving for more private third-party funding. Public relations (PR) activities aimed at the news media, therefore, can help universities attract additional funding.

Social implications – The paper shows that in a digitized media environment, the news media still represent an important source for information about scientific organizations.

Originality/value – The study was the first to analyze the effects of media reputation on the third-party funding of universities.

Keywords Media reputation, Higher education institutions, Third-party funding, News media

Paper type Research paper

Introduction

Communication about scientific results and innovations is both essential from a societal perspective and invaluable to strategic communication of higher education institutions. Decision-makers in higher education, thus, consider public visibility and presentation in the media as desirable and as an appropriate reaction to the increasingly competitive environment for universities (Chapleo, 2010; Kohring et al., 2013; Marcinkowski et al., 2014). Consequently, universities have expanded and professionalized their external communication with a focus on media relations (Bauer and Gregory, 2008; Lafuente-Ruiz-de-Sabando et al., 2018; Serong et al., 2017). One of the goals of university public relations (PR) is to “release information on new results to publicize work being funded by government and private foundations in order to display accountability, but also in hopes of gaining public visibility and thus attracting additional funding” (Borchelt and Nielsen, 2014, p. 58). The underlying assumption for this strategy is that the different stakeholders of universities, including actors who decide over the funding of universities and their research, are influenced by news media coverage. Indeed, research has demonstrated the influence of the news media on various university stakeholders—for example, students (Milo et al., 1989) or the public (Kim et al., 2007). However, empirical evidence on how news media coverage influences the finances of universities remain lacking. Up until now, no study had looked at the effects of
news media coverage on the funding of universities in general or on the development of third-party funding in specific. This stands in contrast to extant research on firms, in which a variety of news media effects on financial performance (e.g. Kiousis et al., 2005) or stock prices (e.g. Raithel and Schwaiger, 2015) have been documented.

In total only 16 percent of the operating expenditures of Swiss universities are accounted for by nongovernmental funding. However, the share of money that is not provided by the government, that is, third-party funding, lies between 10 and 42 percent depending on the university under review (Bundesamt für Statistik, 2018). Different sources of third-party funding, thus, constitute a substantial part of the budget for certain universities. Additionally, increased pressure is being placed on Swiss universities to generate additional funding as, like in other European countries, governmental budgets for higher education are stagnating or even being reduced. By looking at the effect of news media coverage of Swiss universities on the development of their private and public third-party funding, this study addressed a relevant question. The study used the concept of media reputation to investigate the effects of news media on different university stakeholders and was one of the first studies to combine news media data with university financial data. Consequently, this paper adds valuable insights into how key stakeholders in the field of higher education are affected by the news media. The paper focuses on publicly mediated communication about scientific organizations and draws implications for the strategic communication of universities.

Conceptual framework

The concept of media reputation

Research shows that a good reputation—defined as the evaluation of an organization by its stakeholder (Fombrun, 1996)—is a valuable intangible asset. Reputation has been shown to affect the decisions of stakeholders of firms (Kiousis et al., 2005; Pollock and Rindova, 2003; Raithel and Schwaiger, 2015) and universities (Lee et al., 2015; Rindova et al., 2005). During the formation of reputation, the news media are critically important because “they provide a forum where organizations and stakeholders debate what constitutes a good organization and which organizations have good reputations” (Deephouse, 2000, p. 1,097). The news media have thus been shown to influence which organizations the audience perceives as relevant as well as how the audience evaluates them (Carrol and McCombs, 2003; Einwiller et al., 2010; Eisenegger et al., 2010; Lee et al., 2015).

Due to the importance of the news media in the formation of reputation, the concept of media reputation, defined as “the overall evaluation of a firm presented in the [news] media” (Deephouse, 2000, p. 1,092), has gained importance for both researchers and practitioners. Media reputation is not limited to evaluations by journalists or news media companies but also includes ratings by different stakeholders articulated through the media. According to Vogler et al. (2016, p. 323), media reputation “represents the result of the accumulated evaluation of an organization by stakeholder groups including media and the organization itself,” whereas the term stakeholder includes all actors who are able “to articulate their opinion on an organization via the media.” In this process, institutional intermediaries, such as the news media, play a key role (Rindova et al., 2005), because they “are assumed to have superior access to information in order to evaluate organizations” (Van den Bogaerd and Aerts, 2015, p. 21). Overall, the news media play an important role in the process of reputation building for organizations, and this paper assumes that universities are no exception to the rule.

Media reputation of universities

In the wake of new public management reforms, universities are increasingly acting as corporations with clearly set corporate goals (Marcinkowsik et al., 2014). Such goals often
include the development of communicative capital, that is, reputation, which is considered as a valuable intangible asset for universities. The growing corporate focus has resulted in universities, as organizations, being regarded as the primary object of reputation instead of individual scientists, institutes, or research projects. Alessandri et al. (2006, p. 261), for instance, defined a university’s reputation “as collective representations that the university’s multiple constituents – various internal and external constituents, including the media – hold of the university over time.” The corporate reputation of a university is thus the result of the activities of the organization itself and its members. Based on the definition given by Deephouse (2000), this paper defines the media reputation of a university as the overall evaluation of a university presented in the news media. In accordance with Vogler et al. (2016), the media reputation of a university is the result of the accumulated evaluations of the university by different stakeholder groups represented in the news media, including the media and the university itself.

The reputations of universities are often measured by their achievements within the realm of science—so-called academic or scientific reputations (e.g. Conard and Conard, 2000; Petersen et al., 2014; Weingart and Pansegrau, 1999). Measures for academic reputation are, for instance, the number and the citations of publications in peer-reviewed journals (Nicholas et al., 2015), awards such as the Nobel Prize, or assessments by peers (Volkwein and Sweitzer, 2006). However, universities are experiencing increased public pressure from nonacademic stakeholders to legitimize their actions (Verčić et al., 2016). This also means that universities are no longer evaluated based only on their academic achievements but also by nonacademic stakeholders (e.g. politicians or nongovernmental organizations) with regard to non-scientific topics (e.g. finances or sustainability of a university). The reputation of universities is, therefore, to a large extent determined by the evaluations of stakeholders outside of academia. As such stakeholders often focus their evaluation of an organization on the news media (Eisenegger, 2016), media reputation can be considered as a valid measurement for the evaluation of a university by its stakeholders. Alessandri et al. (2006, p. 264), for example, defined media reputation as one indicator of a university’s external performance, as opposed to academic performance. Weingart and Pansegrau (1999, p. 1) argued that “media prominence competes with scientific reputation [...] and the media have different criteria than the sciences for selecting scientists and their topics as worthy of reporting (and attributing prominence), an area where the sciences have internal processes of attributing reputation on the basis of excellence in research.” Thus, a central assumption of this paper is that the media reputation of a university is a measurement distinct from its academic reputation.

Effects of media reputation on stakeholders of universities
To manage their perception by the public, universities are increasingly orienting themselves toward the news media (Kohring et al., 2013). In recent years, universities have expanded their communication departments and invested resources in strategic communication, often aimed at the news media (Serong et al., 2017). As media-generated publicity is considered desirable, universities have been shown to provide their academic staff with incentives to intensify media contacts (Marcinkowski et al., 2014, p. 72). Universities thus invest considerable resources in managing their depiction in the news media, that is, their media reputation.

Despite the relevance of universities for modern society, we know rather little about how the news media cover universities as organizations or what effects such news media coverage has on different stakeholders, including the public. A study on the media reputation of Swiss universities by Vogler and Post (2019) showed that the topic of research dominated news media coverage (61 percent of coverage) and that the tone of the coverage was predominantly positive. A study conducted in Germany (Laukötter, 2014) yielded similar results, with research figuring as the most prominent topic in news media coverage of universities.
(between 49 and 66 percent). Returning to Vogler and Post (2019), they showed that teaching (9 percent), societal and ethical issues (9 percent), strategy and finances (14 percent), and management (7 percent) were also responsible for the media reputation of Swiss universities. Therefore, the media reputation of universities is primarily, but not only, defined by their research activities.

Research on universities has also shown that news media coverage has an effect on university stakeholders, for example, on students’ college choice (Milo et al., 1989) and on perceptions by the public (Kim et al., 2007). More specifically, Kim et al. (2007) demonstrated that negative media publicity can decrease support for a university among local residents. Thus, a good media reputation not only shapes perceptions by stakeholders but also defines the scope of further actions of universities. This observation is supported by Hegglin and Schäfer’s (2015) study on news media coverage of university rankings, which identified a ranking effect and showed that “after the publication of the Ranking results, included universities are presented as more reputable in the media” (p. 381). Overall, the limited research available gives some evidence for the effects of media reputation on university stakeholders.

The focus on the role of news media in the communication strategies of universities seems even more justified, as research in the field of science communication has shown that science, and thus the primary field of activity for universities, is very often received through the mass media (for an overview, see Schäfer, 2011). Nisbet et al. (2002) showed that the media affect the perception of science and technology by the public; more specifically, once formal education ends, the mass media become the most available and sometimes the only source for information about science for the public. In a recent survey in Switzerland, daily and weekly newspapers scored highest when participants were asked about the frequency of contact with science in the media (Schäfer et al., 2018). However, Schäfer et al.’s (2018) work, as well as other research (for an overview, see Brosshard, 2013 or Hargittai et al., 2018), also pointed out that online and social media are playing an increasingly important role in the perception of science by the public. Thus, science follows the general trend in media usage, with digital sources becoming more important (Reuters Institute for Journalism, 2019) and journalism losing its role as the primary gatekeeper (Wallace, 2018). In the so-called hybrid media systems (Chadwick, 2017), people can choose from an abundance of news across online and offline sources in composing their news repertoire (e.g. Swart et al., 2017). These tremendous changes in the media landscape are influencing how members of the public inform themselves about science and eventually also form their opinions on scientific organizations. We can, therefore, conclude that the perception of science, and presumably also of universities, is determined by different sources, with new media channels attaining greater prominence, albeit with ongoing contributions from legacy media.

Effects of media reputation on third-party funding of universities
According to Hornbostel (2001), no univocal definition of the term third-party funding exists, but generally, all money coming from external sources outside the regular budget of universities can be subsumed under the term. As governmental funding for higher education has remained static or has even decreased in many countries (Ressler and Abratt, 2009), the exploitation of additional resources is becoming increasingly important for universities (Liefner, 2003). So-called third-party funding is, therefore, a relevant resource for universities.

This study assumed that university stakeholders who decide over third-party funding are influenced by news media coverage. However, the extent of this influence should depend on the stakeholder groups under review. The key assumption of this study was that stakeholders outside the academic system are likely to be influenced by news media coverage, whereas stakeholders within the academic system are not. Managers of a firm, who decide over private third-party funding, are expected to be influenced by news media
coverage because regardless of their university qualifications, they have little experience in assessing scientific quality. Their evaluation of a university’s capability is therefore likely to be based on other indicators—for example, news media coverage. Positive visibility and a positive evaluation of a university in the news media can therefore be expected to lead to positive developments in the area of private third-party funding. The following hypotheses were tested accordingly:

\(H1\). A positive evaluation of a university in the news media has a positive effect on the development of private third-party funding for that university.

\(H2\). Positive visibility of a university in the news media has a positive effect on the development of private third-party funding for that university.

Because of the assumed effects of the news media on their stakeholders, universities are increasingly devoting more human and financial resources to their external communication, with a focus on media relations (Lafuente-Ruiz-de-Sabando et al., 2018; Serong et al., 2017). Among the goals of such university media relations activities are to place favorable stories and to react to news stories in such a way as to cultivate a positive media image. With professionalization and expansion of university PR departments on the one hand and sinking resources of (science) journalism, on the other hand, the influence of universities on news media coverage is believed to have grown in the last two decades (Fahy and Nisbet, 2011; Göpfert, 2007; Williams, 2015). One of the premises for the strategic focus on media relations is that favorable media coverage enables universities to attract additional funding (Borchelt and Nielsen, 2014). The study at hand, therefore, expects that when the universities themselves or their researchers are being cited in the media, this will lead to more favorable media coverage. The underlying assumption is that universities will, to some extent, be able to determine the topics and the tone in the coverage in a positive manner. The influence of universities on news media coverage, thus, would have a positive influence on private third-party funding. The following hypothesis is tested accordingly:

\(H3\). The influence of a university on news media coverage has a positive effect on the development of private third-party funding for that university.

Scientific experts, who decide over public third-party funding, possess more knowledge and have more direct and frequent experiences with universities. Accordingly, they are assumed to be more capable of evaluating the quality of universities and less likely to be influenced by media coverage. Additionally, the standard peer review system usually involves several independent decisions by experts. Ultimately, then, the evaluation and visibility of a university in the news media should not influence public third-party funding by, in this case, the Swiss National Science Foundation. Accordingly, the following hypotheses were tested:

\(H4\). A positive evaluation of a university in the news media has no effect on the development of public third-party funding for that university.

\(H5\). Positive visibility of a university in the news media has no effect on the development of public third-party funding for that university.

\(H6\). The influence of a university on news media coverage has no effect on the development of public third-party funding for that university.

**Methods**

**The case of Switzerland**

The Swiss higher education system is very globally oriented, constituting numerous competitive research universities. Swiss universities are regularly featured among the top-ranked universities in league tables, for example, the Times Higher Education University
Ranking or the Q+S University Ranking. The sample for this study included the 10 largest Swiss universities. It contained the two renowned technical universities (ETH Zurich and EPFL Lausanne); five larger research universities (Zurich, Basel, Berne, Geneva, and Lausanne), each of which offers a broad research and teaching spectrum; the University of St. Gallen (HSG), which has a focus on management education; and two smaller universities (Fribourg and Neuchatel) with a lower international profile. The sample thus represents the comprehensive profile of universities typical of many higher education systems.

Swiss universities are mainly funded by the government. On average, governmental funds account for 84 percent of the total expenditure of the analyzed universities (Bundesamt für Statistik, 2018). The share of governmental funds, however, varies depending on the university under review, between 58 and 90 percent. Additionally, third-party funding from different sources is growing in prominence due to increasing budgetary restrictions in higher education. The case of Switzerland is, therefore, comparable to those of other countries with higher education systems with a global orientation, especially in Europe. Hence, the results may be at least partially generalizable beyond Switzerland.

Sample and data
This study combined extensive news media data from January 2011 to December 2017 with corresponding data on funding for the 10 analyzed universities. The news media data partially stemmed from a larger research project on the media reputation of universities in Switzerland (Vogler and Post, 2019). The media sample consisted of 20 Swiss news outlets, each with a high reach; more specifically, the sample included subscription press, Sunday press, weekly magazines, and tabloids, as well as radio and television newscasts by the public service broadcaster. Outlets included in the sample used either the German or French language, the two major Swiss national languages. The press articles were accessed through the Swiss Media Database (SMD), while TV and radio newscasts were accessed through the website of the Swiss public service broadcaster. The news media data were collected by manual content analysis, which was conducted by trained coders with sufficient knowledge of the German and French language. All articles that mentioned at least one of the 10 universities were coded. That said, the university had to be covered in at least one longer section, that is, more than one-third of a press article. For TV and radio newscasts, transcribed leads were used, and the university had to be mentioned in the transcript. For every university mentioned in the article, the tone in the media article or newscast was rated by the coder, which resulted in a total of $n = 21,134$ codings. Only text passages with references to the universities under review were considered. The variable designed to measure the evaluation of the universities in the news media used positive, negative, and neutral or balanced ratings, as is common practice in studies on media reputation (e.g. Deephouse, 2000; Vogler et al., 2016). A positive or negative tone was coded when the university or its activities were explicitly praised or criticized in an article, respectively, or when the university was featured in a positive or negative context (e.g. a critical piece on research ethics). When positive and negative ratings co-occurred in the same article, the predominant tone was coded. If positive and negative tones were equally used in the article, the parameter value “balanced” was coded. If no ratings at all were detected, the parameter value “neutral” was coded. For all news articles, whether the university under review was quoted in the text or explicitly mentioned as the source of information, for example, when the results from a university study were published, or when a university researcher gave an interview, was also coded. Intercoder reliability was measured with a random sample of 200 articles, which were processed by two coders. Krippendorff’s Alpha (Krippendorff, 2004) was highly satisfactory for the two variables (0.90 and 0.92).

The funding data for the 10 universities were derived from the Swiss Federal Office for Statistics (Bundesamt für Statistik, 2018), which provides extensive funding information for
Swiss universities. For this paper, two primary sources of third-party funding were analyzed: first, money from the private sector, which includes research projects funded by firms. This source accounts for 5.9 percent of the total funds for Swiss universities on average. Second, money from the Swiss National Science Foundation, which accounts for 8.3 percent of total university funds on average. The Swiss National Science Foundation is the biggest provider of public third-party funding in Switzerland. Funds are granted through peer review based on scientific quality, as evaluated by Swiss and international experts.

**Measures**

The unit of analysis used was university years, meaning all data were aggregated on the level of years for every university. The panel data set included \( n = 70 \) observations between 2011 and 2017 with media data and the corresponding data on funding for the same year. As all variables were calculated as differences between the years, one year of observations was lost, culminating in a data set of \( n = 60 \) observations for the analysis. The descriptive statistics and correlations for all variables are shown in Table I.

The dependent variables were private and public third-party funds. As the sampled universities varied greatly in terms of size, the total amount of funds allocated for each university from both categories also greatly varied. Therefore, for each university, the share of the funding source compared to the total budget was calculated for every year. For the model, differences in the shares from one year to the next were used.

To measure the evaluations of the universities in the media, the data were aggregated on the level of years for every university using the reputation index developed by Eisenegger (2005). The reputation index was developed to measure media reputation through the aggregation of evaluations (i.e. tone or sentiment) in news media articles. For the reputation index, the number of media articles with a negative tone was subtracted from the number of articles with a positive tone and then divided by the total number of articles, including articles with a neutral or balanced tone. The differences in the reputation index from one year to the next were ultimately used for the model. To measure the visibility of a university in the media, the data were aggregated (counted) on the level of years. Differences in media coverage from one year to the next, in percentages, were used for the model. As a further variable, the influence of a university on media coverage was used. The yearly share of news coverage in which a university was quoted or mentioned as a source of information was used as a proxy to measure the influence of universities on media coverage. Again, for the model, the differences in the shares from one year to the next were used.

As a control variable, a measure for academic reputation was included in the model. The top-ranked publications listed in the Web of Science database were used as a proxy to measure academic reputation. This procedure has been used before as a measure to rank universities, departments, and individual researchers (e.g. Torres-Salinas et al., 2009).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>s.d.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share of private third-party funding(^a)</td>
<td>0.39</td>
<td>12.91</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share of public third-party funding(^a)</td>
<td>3.42</td>
<td>9.02</td>
<td>-0.22</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evaluation in the media(^b)</td>
<td>-0.59</td>
<td>5.62</td>
<td>0.29*</td>
<td>-0.15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visibility in the media(^c)</td>
<td>-1.24</td>
<td>27.37</td>
<td>-0.41**</td>
<td>0.21</td>
<td>-0.12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share of media coverage influenced by university(^d)</td>
<td>0.17</td>
<td>6.11</td>
<td>0.40**</td>
<td>-0.18</td>
<td>0.25</td>
<td>-0.34**</td>
<td></td>
</tr>
<tr>
<td>Academic reputation(^e)</td>
<td>-1.23</td>
<td>56.90</td>
<td>-0.02</td>
<td>0.11</td>
<td>-0.41**</td>
<td>0.10</td>
<td>-0.30*</td>
</tr>
</tbody>
</table>

**Note(s):** \(^a\)difference in percent points; \(^b\)difference in percentage; \(^c\)difference in reputation index (Eisenegger, 2005); \(^d\)indicates \( p < 0.01 \); \(^e\) indicates \( p < 0.05 \)

Table I. Means, standard deviation and correlations for university years.
Web of Science database allows one to search for publications on the organizational level, that is, the affiliation of the researchers. For each university and year, all publications that could be found in the database—and which were labeled as “highly cited in the field”—were determined. This included all publications that had at least one author who was affiliated with the examined university. The data were accessed in November 2018. The variable used for the model was calculated as the percentual difference from one year to the next.

Results
First, correlations on the level of the analyzed universities are presented ($n = 10$). The amount of news media coverage of a university (visibility) corresponded with its size ($r = 0.81; p = 0.005$). Size, however, did not correlate with a positive evaluation in the media ($r = -0.01; p = 0.981$). Visibility in the media also seemed to be driven by the total budget of a university ($r = 0.91; p = 0.000$). Again, this was not the case for evaluation in the media ($r = 0.49; p = 0.152$). Looking at academic reputation, it corresponded very strongly with visibility ($r = 0.81; p = 0.004$) but not with evaluation of a university in the media ($r = 0.40; p = 0.254$). These results, although based on few cases, indicate that the evaluative component of media reputation is a distinct measure compared to academic reputation.

Regarding funding, on average, public third-party funding ($M = 5.9$ percent) was more important for the analyzed universities than private third-party funding ($M = 8.3$ percent). However, the shares for each university were very different (see Table II). The share of public third-party funding seems to be greater in universities based in French-speaking regions of Switzerland (i.e. Fribourg, Geneva, Lausanne, and Neuchatel) compared to their counterparts in German-speaking regions. Additionally, universities with a focus on the natural sciences appear to receive more private third-party funding than universities with a broader focus, including the social sciences and humanities: the two universities with a technical focus, ETH and EPFL, as well as the University of Basel, which has strong ties with the pharmaceutical industry in the region, have higher shares of private third-party funding than their counterparts. One exception is the University of St. Gallen (HSG), which specializes in business administration, economics, and law and traditionally maintains many industry partnerships.

To test the hypotheses, the data were analyzed with ordinary least square (OLS) regression (see Table III). The first model (adjusted $R^2 = 0.27$) shows a significant positive effect of evaluation in news media coverage on private third-party funding ($B = 0.62; p = 0.033$), confirming hypothesis H1. A significant negative effect was found for visibility in the media ($B = -0.14; p = 0.016$)—not a positive effect, as assumed in H2. As stated in H3, the greater the influence of universities on media coverage, the more positive the effect on the development of private third-party funding ($B = 0.63; p = 0.021$). The model also shows a slightly significant positive effect of the development of academic reputation on private funds ($B = 0.05; p = 0.095$). The same predictors have no explanatory power for the second model (adjusted $R^2 = 0.000$). No effect of evaluation ($B = -0.14; p = 0.523$) or visibility ($B = 0.05; p = 0.241$) in the media, nor of the influence of universities on media coverage ($B = -0.13; p = 0.536$), could be measured pertaining to public third-party funding. These results confirm H4, H5, and H6. Additionally, a positive development of academic reputation did not lead to higher share of public third-party funding ($B = 0.00; p = 0.861$).

The data for both models met the condition of homoscedasticity as the results of White tests were not significant ($p = 0.10$ resp. $p = 0.97$). Both models were checked for multicollinearity and autocorrelation. Multicollinearity was not an issue, as the tolerance scores were not below a threshold of 0.25 (Urban and Mayerl, 2008). To check for autocorrelation, a Durbin–Watson test was applied. The values for the two models (model 1 = 2.16; model 2 = 2.19) were all in the suggested range, between 1.5 and 2.5 (Urban and Mayerl, 2008).
This paper analyzed the effects of media reputation on university funding in the context of third-party university funding in Switzerland. The basic assumption was that the visibility and evaluation of a university in the news media, that is, its media reputation, influence how
funding decisions are made. At first, the study shows that the evaluation of a university in the news media is a measure distinct from its academic reputation. This observation is of relevance, as the effects of media reputation can be separated from the effects of academic performance. Additionally, as opposed to Weingart and Pansegrau’s (1999) findings, the results of the current study suggest that media visibility does not necessarily compete with scientific reputation, but they are strongly correlated. Evaluation in the media and scientific reputation, however, do seem to be highly divergent.

According to H1, a positive evaluation of a university in the news media has a positive effect on the development of private third-party funding for that university. Contrary to H2, the visibility of a university in the news media was found to be correlated with the negative development of private third-party funding. Although pointing in different directions, these two results strengthen previous research showing that news media coverage has either positive or negative effects on university stakeholders (e.g. Kim et al., 2007). As predicted by H3, the greater the influence of universities on media coverage, the more positive the development of private third-party funding was. This result indicates that the capacity of universities to obtain private third-party funds is partially determined by their capacity to cultivate a positive media image, which would in turn support scholarship, assuming an effect of PR on university funding (Borchelt and Nielsen, 2014). Overall, significant effects of media coverage on private third-party funding were measured. The same independent variables did not influence the development of public third-party funding. These results are in line with H4, H5, and H6, which assumed no effects of evaluation or visibility in the media, nor of the universities influence on media coverage, on public third-party funds.

The study indicates that the effects of media reputation on university funding depend on the stakeholders under review. The results lend support to the idea that decision-makers in firms are to some extent influenced by news media coverage of universities. This observation seems plausible, as managers, regardless of whether they studied at university, are typically not adept in evaluating scientific quality. It is thus possible that other factors—for instance, news media coverage—can both determine the evaluation of universities and have an effect on decisions to fund them. Furthermore, since firms and their managers must be able to legitimize their funding decisions, they will most probably support universities that have a good reputation. News media coverage can give managers clues about which universities have this reputation. The opposite process seems to occur in funding decisions made by scientific experts during peer review. First, these experts usually have superior knowledge about the field of research as well as about the universities in question. Additionally, to legitimize their decision, experts in a peer review process are likely to avoid preferring universities based on their reputation.

Of course, reverse effects, that is, a positive effect of funding success on media coverage, cannot be ruled out. However, the fact that no relation between public third-party funding and media coverage was found supports the causal interpretation in this paper. There is no reason for media outlets to avoid covering public third-party funding success nor for universities to not communicate such success. On the contrary, public third-party funding is likely seen as more legitimate than private third-party funding, which is often scrutinized over fears of a loss of freedom in research. Nevertheless, as no direct causal effects could be shown with the data used, these results must be interpreted cautiously.

From a managerial perspective, this study suggests that a positive evaluation in the news media is an asset for universities seeking funding from the private sector. The growing orientation of universities and their decision-makers toward the media (Kohring et al., 2013; Serong et al., 2017) therefore seems to be a justified strategy. This is further supported by the positive impact of the influence of universities on media coverage on private third-party funding. However, visibility in the media also represents a risk, as higher visibility was shown to lead to the negative development of third-party funding. Visibility on its own should
therefore be carefully considered as a performance indicator for universities or media relations, as it can often be the result of undesirable events, for example, scandals.

From a societal point of view, this paper shows that legacy news media still have an influence on university stakeholders. Due to the ongoing transformation of the media landscape, and especially since the emergence of social media, the role of (science) journalism as a primary gatekeeper of information has certainly declined (e.g. Wallace, 2018). However, the results of this paper indicate that the news media still act as an important disseminator and producer of information about universities in a digitized media environment. This study supports research that has shown that legacy news media are still a relevant source for science-related news (Schäfer et al., 2018). Despite the structural crisis in journalism, the news media provide professional knowledge in the field of science and represent credible sources for independent information about science. This is certainly one reason why the news media, particularly journalists, are still one of the main target groups of PR efforts of universities.

The findings from this study should be viewed in light of some limitations. First, as with all nonexperimental studies, direct causal effects were assumed but not measured. Therefore, more research is needed on the decision-making process of the stakeholders involved in the private and public third-party funding of universities. Further studies could, for instance, collect detailed information about the media repertoires of individuals involved in funding processes. This kind of research would allow patterns of media usage by decision-makers to be linked to the content of news media or other media, especially digital and social media. Further survey data would also provide more information on the assumed direction of the effect, that is, whether media coverage is a relevant source of information in the third-party funding of universities. Another limitation of this study was the relatively short timeframe used, especially given that funding decisions in academia can sometimes take several years. In-depth surveys could address this point by asking respondents about the time at which funding decisions are made, how and when they were involved, and with regard to which kinds of information (e.g. media coverage). It is also important to note that this research is based on a small number of cases (n = 60). To prevent the model from overloading, only one control variable was included, namely academic reputation. Of course, the funding process in higher education is a complex issue and cannot be explained completely by news media data and one major control variable. Nevertheless, the comparison of the two models together with the measured effects indicates that news media coverage is a factor to consider in decisions made with respect to private third-party funding for universities. As this study focused on Switzerland (a relevant case given its globalized and competitive research universities), it would be fruitful to compare different countries with different higher education systems, especially with regard to funding. Despite these limitations, this study generated valuable insights into how third-party funding in higher education is influenced by media reputation. As the higher education environment is becoming increasingly globalized and competitive, such research into how strategic communication can assist universities in attracting additional funding is of high practical and societal relevance.

References


About the author
Daniel Vogler is Research Center for the Public Sphere and Society, University of Zurich, Zurich, Switzerland, and Research Associate at the University of Zurich’s Department of Communications and Media Research. His research interests include public relations, online communication, and journalism. Daniel Vogler is the corresponding author and can be contacted at: daniel.vogler@foeg.uzh.ch