CHAPTER 4

Explaining gender equality in news content

Modernisation and a gendered media field

Monika Djerf-Pierre

4.1 The news media reflect society – or do they?

The idea that journalism should be a mirror of society is widely embraced by both journalists and audiences. One of the longstanding justifications for the lack of gender equality in the news media is indeed that the news "merely reflects society". It is the usual answer to the question of why men's voices outnumber those of women in the news. Men dominate on positions of power, and this is mirrored in the media output.

Feminist scholars often dismiss such claims and offer other explanations to the obvious persistence of gender inequalities in the news (Djerf-Pierre, 2007, 2011; Ross & Padovani, 2017; Steiner, 2012). Even so, the state of play is not the same everywhere in the world; despite the male dominance in the news in almost every country, the scale varies quite substantially (see Chapter 2; Macharia, 2015). Research on gender and media has still been short of empirical testing of possible explanations to the variations in gender equality in media content between countries. To what extent is gender (in)equality in the news a reflection, or extension, of existing social inequalities? And how can we understand the origins of cross-country differences? These are the main questions addressed in this chapter.

In comparative studies of gender equality in the news to date, the explanatory framework often revolves around regional differences, comparing countries in Europe, North America, the Middle East, and so forth. On closer inspection, though, there often seem to be larger variations *within* regions than between them.[1] The region is implicitly seen as embodying a composite of economic, political, social, and cultural factors that supposedly influence equality. To unravel the mechanisms at work, *what it is*, in the regional composites that

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sustains the global patterns, the constitutive parts must be identified: the factors in society and in the media systems that are associated with the level of gender equality in the news media in countries across the globe.

Gender disparities in the media obviously emerge on several and mutually constitutive levels. As van Zoonen (2003: 62) points out, the "gendered structure of media production extends from micro and meso to macro levels". News stories are produced by individual journalists, working in media organisations in societies with diverse media systems and different setups of political, social, and economic institutions which in turn are also part of the global political economy. Gender is at work on all these levels, intersecting with other categories of power and identity, and to disentangle all mechanisms at once is nearly impossible.

The present study opts for a bird's-eye view and concentrates on exposing some of the macro structures that influence how women and men (as groups) are represented in the news – factors that can be identified, measured, and compared at the country level. Cross-country comparisons are – globalisation notwithstanding – critical to the understanding of the causes and consequences of gender disparities. The actualisation of gender equality in society is still largely predicated on welfare arrangements, policies, and legislations decided at the national level. News production is also de facto still geared mainly towards national or local audiences, elite actors, and interests (Hanitzsch et al., 2019a).

This chapter examines how cross-country differences in gender equality in news media content can be explained, drawing from two different approaches: the modernisation approach and the gendered media field approach. The modernisation approach links the level of gender equality in the media to broader processes of socioeconomic development and to the standing of women in society at large. The gendered field approach instead puts focus on how conditions in the media field influence the status of women in the news media in different societies.

The two approaches are not mutually exclusive, but identify and put dissimilar weight on structural, cultural, and agency factors in society and in the media. Neither has, to date, been empirically tested in a systematic, comparative analysis. This research gap provides the background and context for the empirical aim of the present study: to examine the relationship of, on the one hand, gender equality in the news media, and on the other hand, a set of modernisation indicators and media field indicators. Gender equality in the news media is defined in this study as a state where men and women are represented with equal status in the news. The level of gender equality in the news is measured by the Gender Equality in the Media Index (GEM-I), a composite index of six news indicators retrieved from the Global Media Monitoring Project (GMMP, 1995–2015). The construction of the GEM-I is described as length in Chapter 2 of this book.

This chapter proceeds as follows: Section 4.2 describes the two approaches in greater detail and identifies the main factors from both approaches to be

included in further correlation and regression analyses. Section 4.3 explains the methodology. Section 4.4 puts the modernisation and gendered field approaches to the test by examining the relationship between gender equality in the news media (GEM-I) and different sets of modernisation and media field indicators. It culminates with a multivariate analysis to discern how modernisation and media-field factors combine to explain cross-country differences in gender equality in the news media. Section 4.5 closes the chapter with a conclusion and discussion.

4.2 Two approaches: Modernisation and/or a gendered media field

This section outlines the modernisation and gendered media field approaches to identify the most important factors for inclusion in further empirical analyses.

Gender equality as an (inevitable) outcome of modernisation

The core argument in modernisation theory is that gender equality simultaneously is an outcome of modernisation and part of a broader cultural change that is ultimately transforming industrial societies (Alexander, 2007; Alexander et al., 2015; Alexander & Welzel, 2007, 2011, 2015; Inglehart et al., 2002; Inglehart & Norris, 2003; Norris & Inglehart, 2001; Welzel, 2013, 2014). Proponents of this perspective thus relate differences in gender equality between countries to the level of modernisation. The transition from a traditional to an industrial – and further on to a post-industrial – society involves cultural changes that to a large degree underpin the structural and institutional changes that support gender equality.

While older versions of modernisation theory focused solely on economic development, contemporary research embraces a more multifaceted and nuanced conception of human development and includes economic as well as social (education, health), political (democratisation), and cultural (value change) aspects. Welzel (2013, 2014; see also Alexander & Welzel, 2007; Alexander et al., 2015) fits the evolution of gender-egalitarian values into a broader framework of human empowerment and proposes a general "evolutionary theory of emancipation". In the book *Freedom Rising*, Welzel (2013) recognises value change as integral to the achievement of human empowerment and, as a result, the empowerment of women. Human empowerment is defined as the "extent to which people are capable, motivated, and entitled to exercise universal freedoms" (Welzel, 2014: 35). Economic development leads to the diminishing of existential constraints such as scarcity of material resources and poverty. Objective changes in life circumstances produce a shift in subjective values

that gives rise to emancipatory orientations that support universal freedoms (Alexander et al., 2015). These emancipative cultural changes include a rise in gender-egalitarian attitudes.

While cultural change is necessary for gender equality, it is still not sufficient by itself. Values and practices co-evolve in an interactive process; concrete changes in women's and men's lives affect attitudes and values in a recursive manner. The pace of change is furthermore conditioned by the cultural legacy and institutional structure in different countries, such as the Islamic heritage in the Middle East, the legacy of communism in Central Europe, and the egalitarian tradition in Scandinavia (Inglehart & Norris, 2003).

The primacy of value change

In the modernisation framework, gender-egalitarian attitudes are seen as part of a broader set of *values*. Drawing from the World Values Survey (WVS) for empirical evidence, Welzel (2013) makes a distinction between values that indicate people's dissociation from external authority, called secular values, and values that show how strongly people claim authority over their lives for themselves, identified as emancipative values.[2] The rejection of religious ideas and practices, or disbelief values, is a key component in the secular values. Equality (gender equality between women and men) and choice (the tolerance for divorce, abortion, and homosexuality) values are in turn included in the larger cluster of emancipative values. Alexander and colleagues (2015) argue that self-determination regarding sexuality and sexual freedoms represent the youngest domain in which a rising emancipatory spirit can be noticed.

Cultural modernisation does thus not only pertain to gender equality. It involves secularisation, as well as a turn to sexual and reproductive choice values – the latter supposedly also connected to the rejection of religious beliefs. When investigating the relationship with gender equality in the news, it is therefore reasonable to include both equality and choice values as well as disbelief values and examine how each correlate with indicators of gender equality in the news media.

In applying the modernisation framework to the study of gender equality in the news media, we must consequently recognise that modernisation is multidimensional and comprises economic (economic development), social (education, health), political (level of democracy), and cultural (egalitarian and secular values) features as well as different measures of women's standing in society. It also means examining individual aspects of modernisation as well as gender gaps in societal development and egalitarian values to discern if they relate differently to gender equality in the news media. Positive relationships with gender equality in the news are expected across the board.

The media field: The pervasiveness of masculine domination

Whereas the modernisation approach relates the evolution of gender equality to socioeconomic and cultural developments in society at large, the field approach instead targets the media systems and the institutional settings of the news media.[3] This approach draws mainly from feminist applications of Bourdieu's field theory and puts focus on how professional, political, and economic forces in and around the media field combine to shape both the different conditions for women and men working in journalism and the "logic" according to which the news media operate (Djerf-Pierre, 2007; see also De Vuyst, 2020; Melin, 2008). This entails examining the professional norms, news values, principles for selecting news sources, the status of different news beats, and other elements of news production that affect the visibility and status of women in the news (see also Chapter 2).

According to Bourdieu (1998, 2001), a social field consists of a system of competitive social relations where actors compete for the same stakes. What is at stake in a field is, ultimately, the power to decide the "rules of the game"; who is recognised as a legitimate actor (who is regarded as a journalist and who is granted positions and awards), and what is recognised as high quality, valuable, and prestigious in the field (professional norms and standards for what is deemed as "good" journalism). Such status hierarchies structure the journalism fields everywhere on the globe, but access to infrastructure, resources, and material security also differentiate journalism fields in different countries (Örnebring et al., 2018; see also Benson, 2006, 2015).

The journalism fields have their own modus operandi, or "logic", and the field approach strongly stresses the importance of informal rules and norms that the actors in the field abide by. A pervasive feature of the field logic of journalism is that the professional rules and norms are considered gender neutral and normalised in professional practice, but have an inbuilt and obscure gender bias. Positions, news beats, and topics are often gender coded, and those regarded as feminine afforded lower value and status (Djerf-Pierre, 2007; Melin, 2008; North, 2016). This is a key mechanism leading to a relative, but persistent, subordination of women in the news.

Comparative research sustains that, from journalists' point of view, journalism practice is invariably perceived as gender neutral. The Worlds of Journalism (WoJ) project (Hanitzsch et al., 2019a, 2019b) identifies clusters of journalistic cultures in and across different regions of the world, based on journalists' professional orientations, perceptions of the internal and external influences on their work, and the sociocultural and political contexts in which journalism operates. Despite finding distinct cultural contrasts, the gender differences in professional outlooks are indeed small to non-existent. Men and women in different countries clearly perceive their respective journalistic cultures in a

similar manner and adhere to the same professional norms (Hanitzsch & Hanusch, 2012). To the extent that masculine values dominate the profession, it is normalised in newsroom and editorial practices (Lobo et al., 2017; Melin, 2008; Steiner, 2012).

The perils of feminisation

The gendered field approach generally disputes the idea of sustained progress and natural evolution of gender equality in journalism. Rather, the *persistence* and *normalisation* of gender inequalities in all spheres of society, including the media, are asserted. Despite the focus on persistence, there are still cross-country variations to be noted and explained from a field-logic perspective. The degree of "masculine domination" (Bourdieu, 2001) clearly varies between journalism fields in different countries.

Drawing from field theory, these variations of (in)equality should be related to 1) the relative autonomy of the media vis-à-vis the political (state) and economic (market) fields, and 2) the degree of feminisation of the journalism fields in different countries.

Bourdieu and his followers clearly conceptualise the media as a semi-autonomous field, situated in the nexus of professional, political, and economic forces. The strength of external influences – economic and political – varies across both time and cultures (see also Hanitzsch et al., 2019a). The *integrity* of journalism therefore varies across the globe. Integrity here refers to journalists' capacity to pursue their work independently and in accordance with their chosen professional norms and values while fending off improper political and economic pressures and restrictions.

The precaritisation and casualisation of journalistic work, the ongoing concentration and conglomeration of the media, and the increasing competition and financial pressures in many media markets are often depicted as particularly detrimental to women (Byerly, 2013b; North, 2009; Örnebring & Möller, 2018).

Economic influences aside, journalists in many parts of the world are also subject to political pressures, corruption, threats of physical violence, and harassments. Gender is also at play in these situations; a case in point is that women journalists are particularly vulnerable to sexual threats and harassments in their work, not least in social media (Chen et al., 2018; Löfgren-Nilsson & Örnebring, 2016; Vickery & Everbach, 2018). Another is the link between male dominance in a field and higher levels of corruption (see Chapter 7 for a discussion on this).

The field approach thus posits that, in journalism as in all competitive social fields, the most vulnerable actors (in this case, women) always suffer worse from strains and infringements due to their relative subordination. Consequently, gender inequalities should be more evident and persistent in countries with lower levels of journalistic integrity.

The feminisation of journalism is a second factor that – in a field analysis – may influence the level of gender equality in the news, although more difficult to pinpoint. The concept of feminisation is not always clearly defined and sometimes merely used descriptively to illustrate the large influx of women into the profession (Gudipaty et al., 2017). In the gendered field approach, the notion of feminisation links the status of the profession (and journalism in general) to the level of male dominance. In general, low status fields tend to be occupied by women, implying that either the influx of women in journalism leads to a loss of status, or a loss of status opens up the field for women – or a combination of both. The feminisation hypothesis has been used to grasp how the increasing numbers of women journalists in some countries can be combined with low status, low salaries, and precarious work conditions for journalists in the same contexts; for example, in post-communist Eastern Europe, but also in other regions of the world (Byerly, 2013a; Ross & Padovani, 2017; Zuiderveld, 2017; see also Chapter 5 for a discussion on this). The numbers of women at lower (junior) levels in media organisations grow while male dominance at the governance and top-level management levels is maintained (Byerly, 2013a; Gender Links, 2018; Gudipaty et al, 2017; Ross & Padovani, 2017).

Both the perils of feminisation and the restrictions posed by a lack of journalistic integrity can thus be understood in terms of a field logic – a lack of political or economic autonomy in the journalism field is connected to low status of the professionals in the field, and low status positions in any field tend to be occupied by women. A field approach does therefore not perceive of change as evolutionary and ultimately linked to socioeconomic advancements. Instead, gender inequality in the media is the result of an ongoing struggle for power, status, and legitimacy that repeatedly places women in more vulnerable positions in the field. Thus, the variations in the status of women in the news are directly connected to the level of autonomy of the field, and to the degree of feminisation of the profession.

The question still remains as how to put these broad assumptions to the test in comparative empirical analyses. A first way forward is to examine if a relationship exists between the integrity of journalism – vis-à-vis economic influences, political pressures, and biases as well as other violations (harassments) – and gender equality in news.

A second scheme is to examine if and how the degree of feminisation of the profession is related to gender equality in the news. The relationship between the number of women journalists in the field and gender equality in the news cannot, however, be assumed as linear. Research drawing from critical mass theory (see Chapter 5) maintains that the composition of women and men in a social setting is important, but there are certain threshholds when the group composition alters the outcomes (Dahlerup, 2006; Kanter, 1977a, 1977b). The most likely pattern is that the highest levels of gender equality in the news are

found in journalism fields that have achieved gender parity (40–60% of each gender). The fields dominated by men and the most extensively feminised fields where the share of women in the field significantly *exceeds* gender parity should both display lower levels of gender equality in the news.

4.3 Method

The basic methodology in this study is to conduct correlation and regression analyses of the relationship of measures of gender equality in the news with sets of modernisation and media field indicators. The main (and only) dependent variable is the GEM-I, a composite index that comprises six gender-sensitive indicators of gender equality in the news media (cf. UNESCO, 2012). The indicators included in the index are originally retrieved from the GMMP studies from 2005, 2010, and 2015, and are pooled together in the GEM dataset (Färdigh et al., 2020).

Datasets and data sources

Data have been collected from various sources and pooled for use in the present study. The GMMP, the Quality of Government (QoG) Institute, the Varieties of Democracy (V-dem), the World Values Survey (WVS), and Worlds of Journalism (WoJ) provided most of the variables. A detailed and referenced description of all the original data sources and variables used in this chapter is provided in Appendix 4.1.

The pooled dataset comes in two versions. The time series dataset (TS-GEM) uses country-year as the unit of analysis. By including yearly measures for all countries, it provides the largest number of observations (n = country-year). Still, the dataset is what statisticians call "unbalanced", meaning that there are many gaps in the available time series data. For instance, variables from the GMMP, which is the source of our main dependent variable (the GEM-I), is only collected every fifth year, and not all countries participate in the study. To conduct a correlational analysis, variables from one source must be matched with variables from a corresponding year and country from another source. The problem with data gaps is then exacerbated when pooling data from many different sources, since different datasets include different samples of countries and years.

The cross-sectional dataset (CS-GEM) includes the latest available observation for each country, with 2015 as the target year (n = countries).[4] This dataset thus allows for analyses with the largest number of countries, but there are other weaknesses. It only includes measures from one point in time and consequently cannot be used to analyse change.

The TS-GEM dataset is used for all analyses except the examination of values (WVS) and journalism cultures (WoJ), where the CS-GEM dataset is used

to maximise the number of countries included. Due to the limited number of country-year observations in the WVS that correspond with the GMMP country-years, the CS-GEM dataset provides a more comprehensive basis for analysis. The same applies to the variables retrieved from the WoJ survey, which has cross-sectional data collected between 2012–2016.

Although the GMMP is comprehensive and comprises as many as 114 countries (in 2015), it only surveys the news media on a single day. Some countries, particularly small nations that lack resources, submit data based on only a few news stories. This makes the sample less reliable and increases the risk that some odd or extreme values may have occurred by chance. To partly alleviate this problem, observations that constitute odd outliers in the analyses, and those that are based on very weak data in GMMP (few news stories are examined – a sample size of less than 15), are excluded (filtered out) from the analyses.[5] The final analyses include 268 country-year observations from 133 countries in the TS-GEM dataset (68 from 2005, 99 from 2010, and 101 from 2015). The analyses with the CS-GEM dataset include 123 countries. Still, many of the pooled variables from other sources lack measures for the countries or years included in the GMMP, and as a result, there will sometimes be fewer observations in the correlations.

Selection of variables

The next section gives an overview of the variable selection and presents the rationale for the choice of independent variables – that is, variables whose relationship with the GEM-I is to be examined.

The GEM-I is the dependent variable in all analyses. This index calculates the average gender gap in the news (percentage of women – percentage of men) for the following six indicators available in the GMMP reports:

Presence

- women and men as news subjects or sources (all people in the news)
- women and men as reporters (in all stories)

Topics

- women and men as news subjects or sources in economy and business news
- women and men as news subjects or sources in politics and government news

Roles

- women and men as spokespersons
- women and men as experts

The GEM-I can vary between -100 (only men for all six indicators) and +100 (only women for all six indicators). Zero (0) represents full gender equality and a 50/50 distribution of men and women for all six indicators. The construction of the GEM-I is described at length in Chapter 2 of the book, and an inspection of the distribution of the index across countries and time shows that although the index has potential to range between -100 and +100, the actual range is much narrower: from -87.7 to +11.3 in the TS-GEM dataset (six country-year observations with limited data excluded). Almost all countries in the sample are located below the parity mark (0) with the global mean being -55, increasing somewhat between 2005 and 2010, but stalling in 2015 (mean for 2005 = -61; 2010 = -54; 2015 = -53).

The choice of independent variables to measure aspects of modernisation departs from two principles. The first is to include both composite measures of the standing of women in society and separate indicators for each aspect of modernisation (economic, social, political, and cultural). The second is to include indicators of the absolute levels of development as well as measures of the gender gap in outcomes.

Below are the modernisation variables used in the study:

- Economic modernisation: GDP per capita (logged, base 10; Coppedge et al., 2017) is used to measure general economic development and wealth.
- Social modernisation: Education level (mean schooling years in the population aged 25+; Teorell et al., 2017); and Human Development Index (HDI), a composite index developed by the United Nations Development Programme (UNDP) that includes health and education as well as standards of living, thus serving as a general measure of social development.
- Political modernisation: Democracy index (Teorell et al., 2017; original data from Freedom House/Polity) measures the level of democracy in a country.
- Cultural modernisation: Irreligion (share of population with no religious affiliation; Teorell et al., 2017; original data from PEW), disbelief values, gender equality values, and choice values (all retrieved from WVS). These variables measure two main dimensions of cultural modernisation: secularism on the one hand, and egalitarian values on the other.
- Composite gender gap indices: The Global Gender Gap Index (GGI) (retrieved from Teorell et al., 2017) developed by the World Economic Forum (WEF), and The Gender Inequality Index (GII) developed by the UNDP are well-known composite measures of the overall gender gaps in opportunities for women and men in society. The GGI is the most comprehensive and has a relatively stronger focus on women's economic and workforce opportunities and participation.

- Indicators of development for women: These variables measure the absolute level of women's attainments in a range of areas essential for women's empowerment. Education for women (mean schooling years for women aged 25+; Teorell et al., 2017), women's political rights and women's economic rights (retrieved from Teorell et al., 2017; original data from CIRI, Cingranelli et al., 2014), and women in parliament (percentages of women in the lower or single house; Teorell et al., 2017; original data from the Inter-Parliametary Union, or IPU).

The media field variables are selected to tap into the two main field dimensions: autonomy and feminisation.

Autonomy indicators:

- Freedom of the press index (retrieved from Teorell et al., 2017; original data from Freedom House) assesses the degree of print, broadcast, and digital media freedom in different countries and territories. The measure includes three sub-indices: freedom from legal restrictions, freedom from political pressures that influence reporting, and freedom from economic influences that affect access to news and information.
- The media integrity index (retrieved from V-dem, Coppedge et al., 2017) is a measure constructed specifically for this study and it assesses to what extent the media are able to maintain their integrity and resist political biases, government pressures, censorship, corruption, and harassment.
- Editorial autonomy from WoJ (Hanitzsch et al., 2019) measures how much freedom journalists' say they have in selecting stories and choosing which aspects to emphasise.
- Five indices from WoJ (Hanitzsch et al., 2019) estimate the various sources of influences on journalists' work: political influences, organisational influences, procedural influences, economic influences, and personal networks.

Feminisation indicator:

- Women journalists indicates the level of feminisation of the journalism field and is measured by the share of women amongst the country's journalists (as estimated by V-dem experts; Coppedge et al., 2017).

Descriptives for all variables are found in Table 4.1 below.

Analytical procedures

The emphasis in this chapter is to establish relationships without focusing on the causal direction of the influences between variables. Although the ambition is to collect yearly data for as many countries in the world as possible, there

Table 4.1 *Variable descriptives*

	Mean	Std Dev	*n*	Source	Dataset
GEM-I	-55.3	14.0	268	GMMP	TS & CS
Economic modernisation					
GDP per capita (logged, base 10)	0.547	0.234	1490	V-dem	TS
Social modernisation					
education level (mean schooling years, age 25+)	0.562	0.257	239	QoG	TS
Human Development Index	0.599	0.249	1021	QoG/UNDP	TS
Political modernisation					
democracy index	0.704	0.286	1652	QoG/FH	TS
Cultural modernisation					
irreligion (share of population unaffiliated with a religion)	0.121	0.175	152	QoG/Pew	CS
disbelief values	0.392	0.242	79	WVS	CS
gender equality values	0.489	0.244	79	WVS	CS
choice values	0.388	0.231	79	WVS	CS
Gender equality					
Global Gender Gap Index, score	0.453	0.160	1220	QoG/WEF	TS
Gender Inequality Index, score (reversed)	0.536	0.273	869	QoG/UNDP	TS
women's education level (mean schooling years, women age 25+)	0.548	0.260	325	QoG	TS
women's economic rights	0.455	0.279	1042	QoG/CIRI	TS
women's political rights	0.697	0.163	1039	QoG/CIRI	TS
women in parliament (% women in lower or single house)	0.296	0.172	1616	QoG/IPU	TS
Freedom of the press					
freedom of the press index	0.593	0.257	1642	QoG/FH	TS
Media integrity					
media integrity index	0.637	0.184	1542	V-dem	TS
Editorial autonomy					
editorial autonomy: selecting stories, aspects emphasised	0.730	0.176	63	WoJ	CS
Editorial influences					
political influences	0.359	0.231	63	WoJ	CS
organisational influences	0.530	0.267	63	WoJ	CS
procedural influences	0.541	0.209	63	WoJ	CS
economic influences	0.489	0.225	63	WoJ	CS
personal networks	0.383	0.168	63	WoJ	CS
Feminisation					
women journalists (% women)	0.487	0.173	1542	V-dem	TS

Comments: All variables (except GEM-I) are rescaled to range from 0–1 (GII reversed so higher values mean more equality). The TS-GEM dataset includes data from 2005–2015 (*n* = country-year observations), and the GEM-I ranges from -87.7 to +11.3 (observations with limited data excluded). The CS-GEM dataset includes the latest available observation for each country (target year = 2015; *n* = countries), and the GEM-I ranges between -87.0 and +1.9 (mean = -54.2; standard deviation = 14.8; *n* = 123; four observations with limited data excluded). The GGI was first published in 2006, and the scores for 2006 are matched with GMMP for 2005. See Appendix 4.1 for more information about the variables.

Source: GMMP; QoG (Teorell et al., 2017); V-dem (Coppedge et al., 2017); PEW; WVS; WEF; Freedom House; CIRI (Cingranelli et al., 2014); UNDP

are several gaps. This makes it difficult to apply advanced statistical methods (e.g., auto-regressive models or fixed effects models) that might give a more accurate inference of causal relationships. Still, a multiple regression analysis to examine the combined influences of different societal and media factors over time is offered at the end of the chapter.

The *strength* of the association between gender equality in the news media and other variables is measured by correlations. The correlation coefficient (Pearson's *r*) indicates the strength and direction of a linear relationship. It ranges between +1 and -1, where a positive correlation means that they increase in parallel, and a negative correlation means that when one variable increases, the other decreases. What is considered a strong relationship depends on the field of study and what is being measured, but as a general rule, we consider an *r* below 0.39 weak, 0.40–0.59 moderate, and above 0.60 strong.

The *magnitude* of the association of the independent variables on the dependent variable (GEM-I) are indicated by the unstandardised regression coefficients (*b*-coefficients). This measure is included to provide a substantial interpretation of the association between the variables in the analyses. Since all independent variables are measured on different scales, they have been rescaled to range between 0 and 1. Rescaling keeps the original variation of the variables, but the results are easier to compare and understand. By rescaling, the unstandardised *b*-coefficient in a regression analysis now shows how much the estimated value of GEM-I increases when we move from the lowest value of the independent variable to the highest. If, for instance, the lowest GGI score of any country in the study is 0.5 and the highest 0.9, and the *b*-coefficient is 40, the interpretation is that the country with highest GGI is estimated to score 40 units higher on the GEM-I than the country with lowest GGI. The *b*-coefficients are derived from OLS regression models with robust clustered standard errors (cluster = countries).

The explanative power of the independent variables is indicated by the *R*-square (R^2) measure (adjusted R^2 is used in the multiple regressions). It measures how much of the cross-country variations (differences between countries) in gender equality in the news media (GEM-I) can be linearly attributed to, or accounted for, by one or several of the independent variables. This measure can vary between 0 and 1, but is multiplied by 100 to be expressed as a percentage (0 = the other variable does not explain any of the variation in GEM-I; 100 = the independent variable fully explains the variation in GEM-I).

The next section presents the results of the study, starting with separate analyses of the relationship of the GEM-I with the modernisation and field indicators, respectively. This is followed by a multivariate analysis where the most influential indicators from the two approaches are tested simultaneously.

4.4 Analysis: Testing the modernisation and gendered field approach

That GEM-I is related to social developments is hardly surprising. Table 4.2 shows the relationships between the GEM-I and the indicators of economic,

Table 4.2 *The relationship between indicators of modernisation and gender equality in the news media (GEM-I) (Pearson's* r*, unstandardised* b*-coefficients, adjusted* R^2*)*

	Correlation	Max effect	Variation explained (%)	*n*
Economic modernisation				
GDP per capita (logged, base 10)	.309***	19.1***	9.6***	248
Social modernisation				
education level (mean schooling years, age 25+)	.421***	22.6***	17.7***	146
HDI	.394***	21.1***	15.6***	164
Political modernisation				
democracy index	.287***	15.1***	8.2***	264
Cultural modernisation – secularism				
disbelief values (population mean)	.138	8.4	1.9	68
irreligion (share of population unaffiliated with a religion)	.072	5.9	0.5	121
Cultural modernisation – egalitarian values				
gender equality values (population mean)	.542***	32.1***	29.4***	68
choice values (population mean)	.376**	23.3**	14.2**	68

Comments: $^{\#}p < .10$, $^{*}p < .05$, $^{**}p < .01$, $^{***}p < .001$. Data are not available for all countries and years, which means that the number of country-year observations included in the analyses varies between different measures. Indicators of gender equality in the news media (GEM-I) are from the GMMP study (2005, 2010, & 2015). Analyses of economic modernisation, social modernisation and political modernisation are done with the TS-GEM dataset (*n* = country-year observations, 2005–2015). Analyses of secularism and egalitarian values are done with the CS-GEM dataset (including the latest available observation for each country with 2015 as the target year, *n* = countries). All independent variables have been rescaled to range between 0 and 1. The correlation is Pearson's *r*. The max effect is the unstandardised regression coefficient (*b*-coefficient) of the rescaled, independent variable in a bivariate regression on the GEM-I (OLS regression with clustered standard errors, cluster = country). Variation explained is measured by the R^2 (multiplied by 100 to be expressed as a percentage) and is the proportion of the variation in GEM-I that can be linearly attributed to the independent variable in the bivariate regression (OLS regression with clustered standard errors, cluster = country). Observations with limited data are excluded. See Appendix 4.1 for more information about the variables.

Source: GMMP; QoG; V-dem; Freedom House; WVS; Pew; UNDP

social, political, and cultural modernisation, drawing from data for all available countries and years. As surmised, we find significant and positive correlations between the GEM-I and the modernisation measures across the board. The strongest correlation and the largest magnitude are found with the education level in the population, but the HDI measure (which includes both education and health) comes quite close. Still, the correlations are moderately strong at best, and the explained variance is quite low overall.

Cultural modernisation: Strong relationship with values

The relationship between the cultural modernisation indicators and the GEM-I reveals a more interesting and diverse pattern.[6] Irreligion (the proportion of individuals that define themselves as unaffiliated with major religions) has no relationship at all with the GEM-I, and disbelief values in the population has a very weak positive correlation, but it is not significant.

The key feature of the modernisation approach is the strong emphasis on the secular aspects of modernisation. Religious legacies supposedly have a strong imprint on values, and the society's religious tradition clearly impacts on women's political empowerment (Alexander & Welzel, 2011; Inglehart & Norris, 2003; Reynolds, 1999). The lack of association between secularism and gender equality in the news is thus interesting to note in this context. It is true that all world religions have patriarchal roots and that the link between religion and women's emancipation is rather a "matter of the degree of discrimination and the pace of religious liberalization in gender matters" (Reynolds, 1999: 551; cf. Aune et al., 2017). In any case, there is little evidence in this study to support gender equality in the news being related to secularism – or the rejection of religious practices – per se.

The relationships between GEM-I and gender equality and sexual and reproductive choice values in the WVS are, on the other hand, both significant and positive; the correlation with gender equality values is also among the strongest in the study. The interpretation is pleasantly straightforward: the more prevalent egalitarian values are in society, the higher the level of gender equality in the news media. The correlation with choice values is weaker and the variation explained is also much larger for gender equality values than for choice values. Looking more closely at the spread and variation of the two types of values across the globe, we understand better why this could be the case (see Figures 4.1a and 4.1b).

Figures 4.1a and 4.1b map the variations of gender equality and choice values in the WVS for the countries included in the present analysis. The maps visualise both the substantial country differences (in gender equality values in particular) and that the prevalence of gender equality values widely surpasses the support for choice values. This is an indication of the pattern suggested by

Figure 4.1a *Support for gender equality values globally (country mean)*

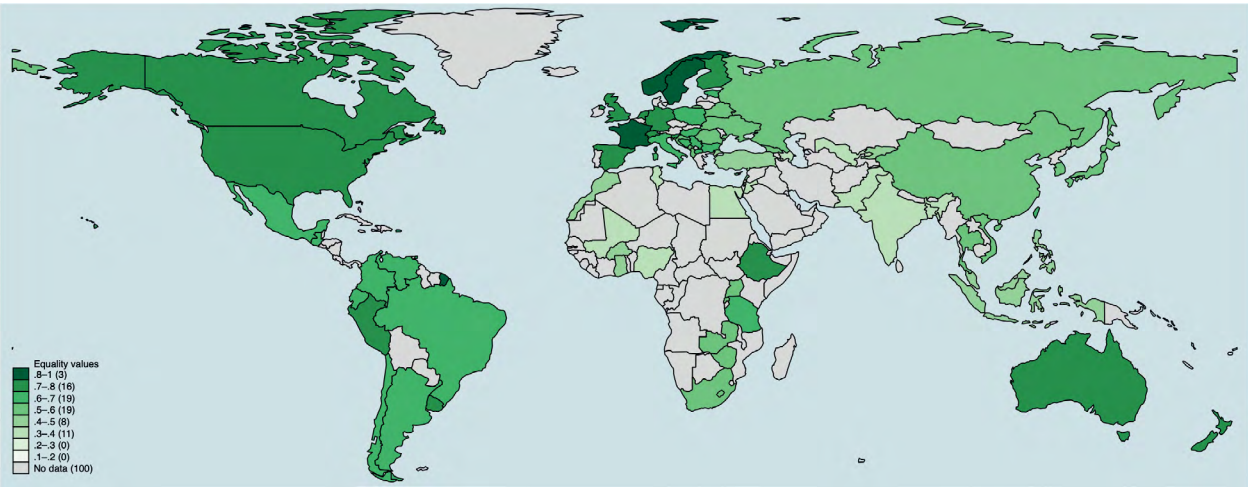
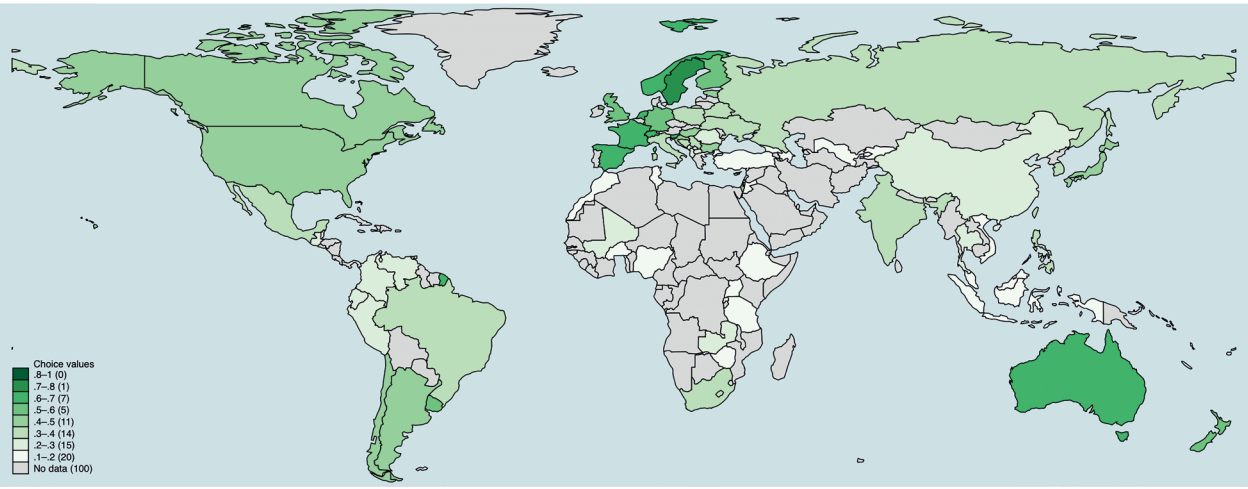


Figure 4.1b *Support for reproductive and sexual choice values globally (country mean)*



Comments: The maps include the latest available observation for each country, most being from 2011–2014. Grey areas lack data. Welzel (2013) constructed the values scales. To measure a respondent's emphasis on gender equality, Welzel used three items indicating how strongly respondents disagree with the statements that 1) "education is more important for a boy than a girl", 2) "when jobs are scarce, men should have priority over women to get a job", and 3) "men make better political leaders than women". Choice values measures how strongly people value freedom in reproductive and sexual choices, using three items indicating how acceptable respondents find 1) divorce, 2) abortion, and 3) homosexuality. The values scale is constructed as an index that scale from 0 (no support) to 1 (full support). See Appendix 4.1 for more information about the variables.

Source: WVS; Welzel (2013)

Alexander and Welzel (2015): the spread of gender equality values precedes the expansion of support for sexual and reproductive choices.

Gender gaps in the media world and in the "real world"

Just as expected, the various measures of the general standing of women in society also display positive relationships with the GEM-I (see Table 4.3). The development and gap measures estimate gender disparities in different ways. The development indicators evaluate outcomes in absolute levels of resources and possibilities; the achievements for men and women are therefore not mutually exclusive. The gender gap approach, on the other hand, is per definition a relation, quantifying the outcomes for women relative to the outcomes for men. It is consequently possible to find a small gender gap in education in combination with low levels of education among the population, if neither girls nor boys go to school. Modernisation research, however, maintains that the gender gap in outcomes closes with increasing levels of development. In any case, the results from this study shows that both the gap and the development measures yield similar results. The associations with GEM-I are also generally stronger than with the modernisation indicators in Table 4.2.

All the indicators of development for women demonstrate positive and significant relationships with GEM-I, and some even come close to being considered "strong". Interestingly, women's education level and economic rights are clearly better predictors of gender equality in the news; the correlations between GEM-I and the political development indicators are consistently weaker, that is, with women in parliament and women's political rights. This means that women's status and opportunities in the economic sphere of society is more important for attaining gender equality in the news than are achievements in the political realm.

Of the gender gap measures, the Global Gender Gap Index (GGI) has the strongest association with the GEM-I – much more so than the GII. This is most likely due to GGI having (relative to the GII) stronger emphasis on women's achievements in the economic sphere.

The GGI and the prevalence of gender equality values are, as a result, the most important modernisation factors to consider for further multivariate analyses. That they are deeply entwined is apparent; the correlation between them is .662 (r, $p < .000$) for the countries in our sample (using the CS-GEM dataset). With the limited data at hand, we are unable to probe deeper into the causal connection between them. The values indicator is only available as a cross-sectional measure for 68 countries in our dataset (and less when more variables are included in the regressions). Such tests should be conducted over time with larger and better samples. Still, if the effects of the GGI and gender

Table 4.3. *The relationship between gender equality in the news media (GEM-I) and indicators of gender equality in society (Pearson's* r*, unstandardised* b*-coefficients,* R^2*)*

	Correlation	Max effect	Variation explained (%)	*n*
Composite gender gap indicators				
Global Gender Gap Index (score)	.467***	40.7***	21.8***	233
Gender Inequality Index (score, reversed)	.310***	16.1***	9.6***	240
Development indicators for women				
education for women (mean schooling years, women, age 25+)	.438***	24.7***	19.2***	207
women's economic rights	.432***	19.8***	18.6***	166
women in parliament (share of women in lower or single house)	.259***	20.3***	6.7***	259
women's political rights	.225**	19.6***	5.0***	166

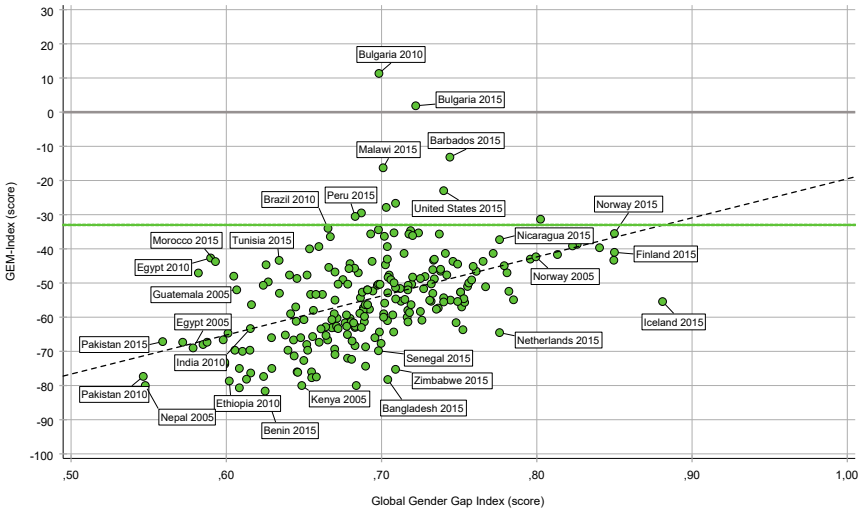
Comments: $^{\#}p < .10$, $^{*}p < .05$, $^{**}p < .01$, $^{***}p < .001$. All analyses use the TS-GEM dataset, *n* = country-year observations (2005–2015). Data are not available for all countries and years, which means that the number of country-years included in the analyses varies. Indicators in the GEM-I are from the GMMP study (2005, 2010, & 2015). Country-year observations with limited data are excluded. All independent variables have been rescaled to range between 0 and 1. The correlation is Pearson's *r*. The max effect is the unstandardised regression coefficient (*b* coefficient) of the rescaled, independent variable in a bivariate regression on the GEM-I (OLS regression with clustered standard errors; cluster = country). Variation explained is measured by the R^2 (multiplied by 100 to be expressed as a percentage) and is the proportion of the variation in GEM-I that can be linearly attributed to the independent variable in the bivariate regression (OLS regression with clustered standard errors; cluster = country). The GGI was first published in 2006, and to match the GGI with the GMMP, the scores for 2006 are matched with GMMP for 2005. The GII has been reversed so that higher values mean more equality. See Appendix 4.1 for more information about the variables.

Source: GMMP; QoG; WEF; CIRI; IPU; UNDP; V-Dem

equality values are tested simultaneously in a multivariate regression model (not in table; using CS-GEM, OLS regression), the GGI turns insignificant. This is at least some indication that gender equality values can be seen as a mediator between women's standing in society and gender equality in the news.

All things considered, of the variables in the modernisation cluster, the GGI is deemed to be the best and most useful predictor of gender equality in the news. To better understand the relationship between the GEM-I and GGI, it is helpful to visualise both the overall pattern and the location of different countries on the GEM-I chart. Figure 4.2 shows a scatterplot of the GEM-I and the original GGI scores, and it provides a graphic illustration of the relationship between the two variables.

Figure 4.2 *The relationship between the Global Gender Gap Index and the GEM-I*



Comments: Number of country-year observations = 233 (from 2005, 2010, & 2015; observations with limited data are excluded). The GEM-I indicators are from the GMMP, and the GEM-I can vary between -100 (all men in the news) to +100 (all women in the news, with zero (0) indicating full gender parity. The green line indicates the threshold for a 33/67 proportion of women and men in the news, or women receiving at least 50 per cent of the media attention devoted to men. The GGI was first published by the WEF in 2006, and to match the GGI with the GMMP, the GGI scores for 2006 are matched with GMMP for 2005. The GGI ranges between 0 (women have 0% of men's attainment and resources in all areas) and 1 (women have 100% of men's attainment and resources in all areas), with 0.5 indicating that women having 50 per cent of men's attainments and resources. Pearson's r = .467 (p < .001), b = 114.3 (p < .001), R^2 = .218 (p < .001). Equation for the fitted regression line (dotted line): GEM-I = -133.8 + 114.3 × GGI. See Appendix 4.1 for more information about the variables.

Source: GMMP; QoG (original data from WEF)

Each dot in Figure 4.2 represents a country-year observation placed in the diagram relative to its position on two axes: The GGI at the horizontal axis and GEM-I along the vertical axis. The GGI can vary between 0 and 1, and 1 indicates full gender parity in society. The GEM-I can vary between -100 (only men in the news) and +100 (only women in the news), and zero (0) represents full gender parity in the news. Looking at Figure 4.2, three main conclusions can be drawn:

- *Gender equality is generally lacking both in society and in the news.* All dots are located below the equality marks for both measures. The only exception for the GEM-I is Bulgaria, with a small surplus of women in the news. As regards the GGI, no country in the world has yet fully closed the gender gap, although the Scandinavian countries have reached furthest towards parity.
- *Gender equality in society is generally higher than in the media.* In all countries in our sample, women's attainment in society has reached 50 per cent or more of that of men (0.5 or higher on the GGI). For the GEM-I, only

a small number of countries have reached or surpassed such a level of equality. In terms of comparability, a score of 0.5 on the GGI corresponds with a GEM-I score of -33 or higher. This threshold is visualised by the green line in Figure 4.2, and as we can see, most countries are located below this line.[7]

- *Countries with smaller gender gaps in society generally have more gender equality in the news.* The dots clearly form a rising pattern. This means that countries that score high on the GGI in a certain year tend to have higher levels of equality in the news the same year; Sweden, Finland, and Norway appear closer to the upper right corner. Countries with low scores for both indicators, such as Pakistan (2015), Nepal (2005), and Ethiopia (2010), appear in the bottom left corner. Figure 4.2 also illustrates that the country scores indeed vary over time, as evidenced by the small increase in GEM-I in Pakistan between 2010 and 2015.

The media field and gender equality in the news

Moving on to examine the correlations resulting from the analyses of the media field indicators, we find the associations with the various measures of the autonomy of the media field to be quite weak overall (see Table 4.4).

The measures of media freedom – both the freedom of the press index with the three sub-indices and the media integrity index – display positive and significant associations with the GEM-I, but they are feeble at best and the explanative power low. The main press freedom index still performs best of them all. A country with the highest press freedom in the world ranks about 16 scale units higher on the GEM-I than countries with the lowest press freedom.

The indicators of editorial influences retrieved from the Worlds of Journalism (WoJ) study only have 53 country observations that can be matched with the GMMP data. Despite the limited data, the direction of the relationship is as expected: editorial autonomy, political influences, and economic influences are negatively related to gender equality in the news, whereas no association can be seen with the other sources of influence (also expected). Still, the associations are rather small and weak, and economic influences just about reach statistical significance. The positive relationship with the level of editorial autonomy is somewhat stronger, but not much better in terms of explanative power.

We subsequently find that the influence of restrictions on journalistic autonomy is somewhat weaker than could be expected from field theory. The feminisation indicator (percentages of women journalists), however, tells a very different story. Here, we find correlations that exceed .500 and an explanative power of over 25 per cent. The result is both clear and easy to interpret: the more women in the journalism field, the more gender equality in the news.

We hypothesised earlier that gender equality in the news should be the highest in countries that have reached gender parity in the profession and lower

in fields with either extensive male dominance or extensive feminisation (over 60% women journalists). This posits a curvilinear relationship (not linear) with a ceiling, or peak, located at gender parity in the field. However, a closer look at the pattern of the relationship reveals it to be – above all – linear and not very susceptible to thresholds or ceiling effects.

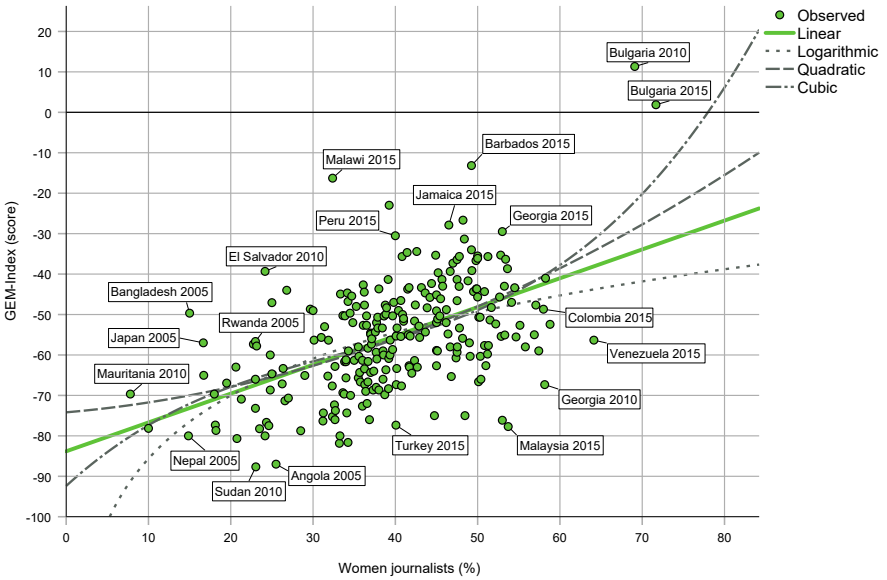
Table 4.4 *The relationship between media field indicators and GEM-I (Pearson's r; unstandardised b-coefficients; R^2)*

	Correlation	Max effect	Variation explained (%)	*n*
Autonomy – media freedom				
freedom of the press index	.288***	16.2***	8.3***	265
freedom of legal restrictions (sub-index)	.291***	15.8***	8.5***	264
freedom of economic influences (sub-index)	.265***	14.8***	7.0***	264
freedom of political pressures (sub-index)	.257***	14.8***	6.7***	264
media integrity index	.257***	20.4***	6.6***	253
Autonomy – editorial autonomy				
editorial autonomy in selecting stories and aspects emphasised	.291*	22.3*	8.4*	53
Editorial influences				
political influences	-.261#	-15.4#	6.8#	53
economic influences	-.213	-12.0	4.6	53
procedural influences	.135	9.3	1.8	53
organisational influences	-.075	-3.6	0.6	53
personal networks	-.004	-0.3	0.0	53
Feminisation				
women journalists (%)	.519***	45.7***	26.9***	253

Comments: #$p < .10$, *$p < .05$, **$p < .01$, ***$p < .001$. Data is not available for all countries and years, which means that the number of observations included in the analyses varies. The GEM-I indicators are from the GMMP study (2005, 2010, & 2015). The analyses of freedom of the press, media integrity, and feminisation use the TS-GEM dataset; *n* = country-year observations (observations with limited data are excluded). Analyses of editorial autonomy and editorial influences use the GEM-CS dataset; *n* = countries (no observations excluded). The correlation is Pearson's *r*. The max effect is the unstandardised regression coefficient (*b*-coefficient) of the rescaled, independent variable in a bivariate regression on the GEM-I (OLS regression with clustered standard errors in the TS-GEM analyses, cluster = country). Variation explained is measured by the R^2 (multiplied by 100 to be expressed as a percentage) and is the proportion of the variation in GEM-I that can be linearly attributed to the independent variable in the bivariate regression (OLS regression with clustered standard errors when using the TS-GEM dataset, cluster = country). Influences variables are derived from the means of the following indicators in WoJ: Political influences (politicians; government officials; pressure groups; business representatives); Organisational influences (managers of news organisation; supervisors and higher editors; owners of news organisation; editorial policy); Procedural influences (information access; journalism ethics; media laws and regulation; available news-gathering resources; time limits); Economic influences (profit expectations; advertising considerations; audience research and data); Personal networks (friends, acquaintances, family; colleagues in other media; peers on the staff). See Appendix 4.1 for more information about the variables.

Source: GMMP; QoG/Freedom House; V-dem; WoJ

Figure 4.3 *The relationship between women journalists and the GEM-I*



Comments: Number of country-year observations = 265 (observations with limited data are excluded). The data for the GEM-I indicators are from the GMMP study (2005, 2010, & 2015). The percentages of women journalists are from V-dem. Pearson's r = .519 (p < .001), b = .713 (p < .001), R^2 = .269 (p < .001). Equation for the fitted linear regression line (green straight line): GEM-I = -83.8 + 0.71 × women journalists. The dotted and broken grey lines show the results of alternative methods to fit a regression line to the dots in the scatterplot (logarithmic, quadratic, and cubic). R^2 for the logarithmic = .236 (p < .001), quadratic = .275 (p < .001), and cubic = .282 (p < .001). See Appendix 4.1 for more information about the variables.

Source: GMMP; V-dem

The scatterplot in Figure 4.3 visualises the pattern and also tests different ways of fitting a line to the data at hand. Although the cubic and quadratic methods perform marginally better than the linear (higher R^2), none of them display a peak or cap at gender parity in the field. If anything, gender equality in the news accelerates after gender parity in the journalism field is reached (however, the outlier Bulgaria might be responsible for this result). A big caveat is indeed that there are very few countries in the sample that can be classified as "extensively feminised" (instances where the share of women journalists exceeds 60%). This means that our results reveal nothing about the effect of vast feminisation on the level of gender equality in the news, a relationship we hypothesised earlier to be negative. What we can say is that gender equality in the news increases with the share of women working in journalism, up and until gender parity is reached in the profession.

Towards a multi-perspectival approach

The results so far show that both the individual modernisation indicators and most of the media field indicators correlate positively with GEM-I, but also that the associations with the autonomy indicators are weaker overall.

Still, we should not be too hasty to dismiss the role of journalistic autonomy. In the field approach inspired by Bourdieu (1998), the media are seen as only *partially* autonomous vis-à-vis the political and economic fields. Economic and political influences clearly condition the professional practices of journalism, directly or indirectly. Bourdieu also never considers gender as a field in its own right (Moi, 1999) but sees it as a part of the "general social field"; gender is a combinatory category that infiltrates and influences every other social category.

Media sexism and the lack of visibility and voice of women in the public sphere are thus also expressions of – in Bourdieu's own terminology – the masculine dominance in the "general social field". This dominance is replicated and reproduced in every other field:

> The relation of domination between men and women [...] establishes itself in the whole set of social spaces and subspaces, that is, not only in the family but also in the educational world and the world of work, in the bureaucratic universe and in the field of the media. (Bourdieu, 2001: 102)

The field approach does certainly not disregard the general material and cultural conditions for women in society – factors that constitute the cornerstone of the modernisation approach. Rather, journalism is seen as nested with other fields, and the general status of women in society always conditions the prospects for women in all areas of society, including the news media. This also entails that society and media factors are entwined; they need to be considered together.

The correlation analyses conducted so far have only considered one independent variable at the time. As a final analytical step, we test if a combination of societal (modernisation) and media field factors can increase the explanatory power and improve our understanding of the mechanisms at work.

This is done through a multiple regression analysis, with controls. Due to data being retrieved from many different sources, the number of country-year observations decreases considerably when several variables are tested simultaneously. Sadly, the countries and years covered by GMMP only partially match the countries and years included in the other datasets. There are also fairly strong correlations among the modernisation indicators, not the least with the GGI, and if we include all of them, they all tend to turn insignificant. This is

not surprising, since it is a well-known fact (not the least from modernisation research), that most things that shape a "good society" with widespread welfare for its citizens tend to go together: economic development, democracy, health, education, human rights and freedoms – and gender equality.

We thus limit the analysis to include the modernisation and field indicators that displayed the strongest associations with the GEM-I in the previous analyses – the GGI, women journalists, and the press freedom index. We also include "year" to measure the development over time, while accounting for that change is not continuous. The GEM-I increases over time, but the leap in gender equality in the news happened between 2005 and 2010, with no apparent progress in 2015 (see Chapter 2). Finally, we include GDP per capita to control for the general level of economic development in a country which we suspect may influence many other factors in the model.

We choose the OLS regression method (with robust clustered standard errors; cluster = country) as it is geared towards explaining differences across countries, which is what we are most interested in discovering in this study (see note 8 for tests with alternative methods).[8] It also provides the most easy to understand, straightforward estimates. The results (see Table 4.5 in Appendix 4.2) show that both gender equality in society and the level of feminisation have substantial and significant effects, even after the inclusion of controls. More precisely: 1) the higher the women's standing in society (the GGI) and the higher the level of feminisation of the journalistic field, the higher the level of gender equality in the news; 2) journalistic autonomy (press freedom) also contributes positively to gender equality; and 3) when region is added to the analysis, the pattern is amplified rather than weakened, and the explanative power increases to 43 per cent. The effect of GDP per capita is now negative, meaning that more affluent countries have lower levels of gender equality when women's standing in society, time, and freedom of the press are accounted for. The region dummies are significant, showing a higher level of gender equality in North America and Latin America and lower in Africa, Asia, and the Pacific. The significant country dummies indicate that there are still unobserved factors (additional influences on gender equality in the news) in the regions not accounted for by observing the standing of women in society, economic development, feminisation of the journalistic field, and the press freedom in the respective country. These could also not be accounted for by including other independent variables, such as level of democracy or women's education (not in table). What these unobserved factors are remains to be examined in future research.

4.5 Conclusion and discussion

This chapter examines the possible explanations for the variations in gender equality in the news media between different countries across the globe. The relevance of and empirical support for the modernisation and gendered media field approach are tested by means of correlation and regression analyses.

The modernisation approach to gender equality posits the rise in gender equality – in the media and elsewhere – as primarily linked to socioeconomic development. Socioeconomic progress brings about cultural change which – eventually – leads to increasing gender equality in different spheres of society. Thus, institutional frameworks that promote women's participation in political and economic life, such as women's access to education, political representation, and participation in the work force, should be important prerequisites for gender equality in the media. The modernisation approach accords much importance to the general evolution of cultural norms, and values regarding gender and traditional and patriarchal values in society should have a key role in suppressing gender equality in the news.

The modernisation approach yields strong support in this study. Most aspects of modernisation, including the general level of gender equality in society, are positively related to gender equality in the news media. Of all the modernisation factors examined, the spread of gender equality values, as measured in the World Values Survey, and the general standing of women in society, assessed by the Global Gender Gap Index, proved to be the best single predictors of gender equality in the news media in the study.

The strength of the associations between gender equality in the news and single societal factors – both gender gaps and degrees of economic, social, political, and cultural modernisation – ranges from weak to moderate. Still, the measures of women's standing in society were better predictors of gender equality in the news than the general political and economic development indicators. Modernisation of different spheres of society are therefore important for media gender equality, but only to the extent that they translate into improving women's overall status in society.

The gendered media field approach primarily posits gender disparities as the outcome of an ongoing, constant struggle for power and status within the semi-autonomous media fields in different countries. The professional rules and norms that govern the modus operandi of the journalism field are considered gender-neutral and normalised in professional practice, but still have an inbuilt and pervasive gender bias. This approach directs attention to how professional, political, and economic forces conjoin in positioning women in relative subordination in the media field. Political interferences and economic pressures, corruption and harassment of journalists, rampant marketisation, and the ongoing concentration and conglomeration of media markets are believed

to lead to a loss of autonomy and integrity for the professionals working in the media. These influences are particularly detrimental to women due to their vulnerable (subordinate) positions.

One of the media field indicators proved to be an exceptionally good predictor of gender equality in the news: the level of feminisation. The percentages of women journalists displayed the largest magnitude of association of all measures in the study. Importantly, this effect remained even when controlling for other factors, such as the general standing of women in society. Recruiting more women to the journalism field is evidently important for achieving gender equality in the news. Still, we do not know if this is because women journalists are better at recognising and recruiting women as news sources (research in this area is rather conflicting) or if more women in the field creates a more egalitarian news culture that stimulates all journalists – both men and women – to become more gender aware and inclusive in their reporting.

The autonomy indicators were less successful in explaining the significant variations in equality that exist between countries. Yet, both the level of press freedom and media integrity were significantly related to gender equality in the news and the direction of influence was as expected: more autonomy and integrity vis-à-vis external influences is associated with higher levels of gender equality in the news.

Even so, since very few countries have reached equality in the news, what our study de facto examines is the explanations for the various degrees of gender inequality in the news. From a field-theoretical point of view, women's lower status in society (and their subordination in the general social field) is believed to also permeate and condition their status in the media field. Societal and field factors are thus seen as interrelated and should be considered simultaneously. The results of this study clearly sustain the virtues of such a multi-perspectival approach. While the improvement of women's standing in society is essential for reducing gender inequalities in the news media, the level of feminisation and the journalistic autonomy in the media field also have unique influences on the levels of gender equality in the news in different countries. Countries where women have a higher standing in society, more women in the journalism field, and more autonomy for journalists, have less inequality in the news. The extent to which gender inequalities in the news have been alleviated is evidently an outcome of a combination of societal and media-field factors.

Modernisation theory – both older and more recent versions – is frequently accused of being ethnocentric and having a Western bias, and feminist scholars have also raised criticism concerning gender bias. Amongst others, Scott (1996: 5) argues that both the (liberal) modernisation approach and the (Marxist) dependency theory "are grounded in somewhat similar masculinist notions of what it means to be modern". Even the global World Values Survey has been accused of Western bias; ethnocentrism, selective choices of variables, and

built-in biases that "confirm the superiority of the Western world" (Lundgren, 2015: 51; McLaren, 2019).

The same criticism can certainly be raised against the application of modernisation theory in this study. Still, modernisation research also emphasises universal, individual rights that pertain to both men and women, including equal opportunities for making reasoned life choices. These individual rights constitute the normative foundation of the globally acknowledged, and largely celebrated, conception of human rights (Malhotra et al., 2002; Nussbaum, 1999).

The widely used global indices assessing women's empowerment and the status of women in different countries (the GGI from the World Economic Forum, and the GII and the Gender Development Index, developed by the UNDP) are, above all, composite indices of gender gaps in a range of outcomes that have been established *both* as human rights and as indicators of modernisation, such as access to education, standard of living and work opportunities, health, and political empowerment.

The stance taken in this study is therefore that it is perfectly plausible to be interested in the influence of societal development and women's standing in society on the level of equality in the news media without abiding by the notion of continuous evolution of human freedoms or the primacy of values change. To identify and estimate gender gaps is essential for all policy work aiming to improve the life-choices and empowerment of women. In an often-cited definition by Mosedale (2005: 252), the relational component is clearly emphasised: "women's empowerment [is] the process by which women redefine and extend what is possible for them to be and do in situations where they have been restricted, compared to men, from being and doing".

What is evident from the present study, as from every other study of gender and journalism, is that formal policies and legislations do not guarantee equality (Byerly, 2013a; Ross & Padovani, 2017; see also Chapter 3). Even in the most gender egalitarian Nordic countries, gender equality in the news is worse than in the "real world". Women and men may have different aspirations and make different choices, but the choices they make are always conditioned by material and cultural circumstances.

Still, the connection between culture, media, and society is envisioned quite differently in the two approaches. In the modernisation approach, culture is regarded as a set of values, norms, and attitudes shared by a collective. Much emphasis is placed on cultural change, and the media are understood as part of the cultural sphere; in media-saturated societies, the news media are important, if not the most important, vehicles for circulating cultural values. Media can thus both foster sexism through the proliferation of gender stereotypes in media content and serve as conduits for positive cultural change, depending on the social context in which they operate. Values are thus implicitly seen as preceding action; "thinkings" of gender incites and guides "doings".

In the gendered field approach, culture is rather conceptualised as shared practices; it is doings as well as thinkings. The relationship between media and culture is consequently much more amorphous and difficult to pin down. The troubled relationship between the doings and thinkings of gender in the media field (Löfgren-Nilsson, 2010) is obvious, and there are ample indications of a mismatch between publicly stated values and concrete practices, not the least as evidenced by the global revelations of widespread sexual abuse and harassment by the #metoo movement in 2017. The complex relationship between norms and ideals, and actions, is a pervasive feature of journalism practice, everywhere in the world (Mellado, 2020). This mismatch is, on the other hand, not unique to the media field. Corruption is broadly recognised as wrong, but the actual practice of bribery is widespread across the world (Rothstein, 2018). Lundgren (2015) also notes that the support for democracy in the Arab states is among the highest in the world, but these values are not recognised in the actual level of democratic rule.

Although values, in most instances, can be a good-enough predictor of behaviour, they are clearly not identical or substitutable. While the present study (and GMMP, which it draws from) has an invaluable advantage in that it exposes the actual practice of journalism (real news content is measured instead of conducting interviews or relying on country experts to gauge the status of women in the news), the results, above all, show that norms and values in the general social field and the journalism field may vary, but the actual practice of making news seems – so far – to favour men's voices over women's voices in most countries in the world.

This leads us back to the question posed in the introduction to this chapter: do the media serve as mirrors of society with regard to gender equality? Here, the results indicate that the media world of news is considerably less gender equal than the "real world", at least when measured by established gender gap indices such as the GGI. Suffice it to say that the mirror postulate – the presumption that the news media merely reflects existing power structures and that media sexism is but a derivative of the general standing of women in society – finds faint support in the present analysis.

Notes

1. The GMMP's cross-national study of the representation of women and men in news media content reveals substantial intra-regional differences regarding gender representation (Macharia, 2015). Even in the supposedly egalitarian Nordic countries, the 2015 GMMP study shows significant variations: the share of women as news subjects in Sweden was 31 per cent and in Iceland only 18 per cent. Similarly, in the IWMF 59-nation study of the status of women in the news media industry (Byerly, 2013a; see also Chapter 5), the five participating African countries rank very differently in equality: South Africa (leaders); Kenya, Namibia, and Uganda (middle group); and Ghana (least progress). The group of countries "taking the lead" in advancing women's status in the newsrooms included the Eastern European countries Bulgaria

and Estonia, Russia, but also Sweden and South Africa. What empirical evidence suggests is thus that region may be a crude predictor of national differences.

2. According to Welzel (2013), from the viewpoint of human empowerment, "secularisation is the demystification of sacrosanct sources of authority over people". He identifies four domains of such authority: 1) religious, 2) patrimonial, 3) state, and 4) conformity norms. Secular values in the domain of religious authority is called agnosticism, but in the WVS dataset, it is labelled disbelief values. In the present study, we only focus on the first domain – religious authority – but use the term secularism. Emancipative values also include two additional categories: autonomy (individual independence) and voice (valuing people as a source of influence in society). However, only equality and choice are included in the present study.
3. There is a plethora of comparative research on media systems and the media fields in different countries, not the least the several studies spawned by Hallin and Mancini's seminal book *Comparing Media Systems* (2004) and studies applying new institutional theory to the study of the media. Gender is still largely invisible in most of this research.
4. If data for 2015 is absent, the closest available observation is included instead, starting with 2014 and going backwards. For our dependent variable (the GEM-I), most of the observations in the CS-GEM dataset are from 2015, followed by 2010.
5. The following 15 observations are excluded: Suriname 2005, Ireland 2010, St. Lucia 2010, St. Vincent 2010, Togo 2010, Chad 2015, Haiti 2015, Ethiopia 2015, Lesotho 2015, Niger 2015, Solomon Island 2015, St. Lucia 2015, Gabon 2015, Congo 2015, Burkina Faso 2015. However, since many of these also lack data for one or many of the indicators in the GEM-I, the de facto exclusion of observations – the filtering of observations with a valid measure for the GEM-I – is much smaller: between 2–6 country-year observations for analyses with the TS-GEM dataset, and 0–2 observations with the CS-GEM dataset. It is also important to note that we also ran, as a robustness test, all correlations and regressions with the filtered variables included, and we achieved very similar results. Thus, the conclusions would have been the same even if we included the countries with weaker data.
6. Modernisation research shows that 1) gender-egalitarian values are stronger among women than men, 2) in the younger generation, and 3) that the gap that exist between traditional agrarian societies and egalitarian post-industrial societies is far greater than differences between women and men within each type of society (Inglehart & Norris, 2003). Further, 4) the society's religious tradition also has a strong imprint on values (Inglehart & Norris, 2003, 2013), and the Christian religious heritage is linked to a stronger emphasis on gender-equality values (i.e., further religious modernisation), whereas the Islamic heritage is associated with a stronger emphasis on patriarchal values (Reynolds, 1999; Alexander & Welzel, 2011). These results hold across time, between generations, and – interestingly – irrespective of the level of religiousness (Alexander & Welzel, 2011).
7. A further illustration of the distorted relationship between the media world and the "real world" can be found in Figure 4.4 in Appendix 4.2, where we have recalculated the GEM-I to correspond with the measurement model applied by the GGI (indicators are measured as ratios, i.e., outcomes for women and outcomes for men). The green line in Figure 4.4 represents the hypothetical situation where the gender gap in the news perfectly reflects (mirrors) the gender gap in the "real world". As we can see, there is a linear relationship (the dotted line) but most of the dots are located below the green line at the lower right-hand side of the chart.
8. There are certainly other regression methods that could have been used in the study, but the OLS method is by far the easiest to interpret. Still, to make sure the results are reliable, the models have also been tested with random effects, mixed effects, and fixed effects (fixed effects regression and country dummies) methods. The random and mixed models yield almost identical results as the OLS models presented in the chapter (with robust clustered standard errors, cluster= country). In the fixed effects model, on the other hand, all coefficients except time (year) turn insignificant. There are clearly methodological problems with using a fixed effects method with the data at hand. Although GMMP measures real outcomes in terms of actual media representation, it only surveys one day every fifth year, and many countries have only participated once (which means that the GEM-I cannot vary in a fixed effect model).

The timespan covered by the GMMP variables is also quite small, and when examining the development over time, we only have data for the years 2005, 2010, and 2015. Over this period, there may be too little variation in the independent variables, which results in little variation to "work with" when relating GEM-I outcomes to societal factors. To be sure, the explained variance is also very low in the fixed effects model (0.092 overall). Some countries furthermore only sample a limited number of news media and news stories. This is less reliable than larger samples collected over longer periods, and parts of the variation that can be observed over time is probably due to random "errors" that cannot be attributed to any incremental changes in societal or media factors.

References

Alexander, Amy C. (2007). Empowering women: The role of economic development, political culture and institutional design in the world's societies. University of California, Irvine: Center for the Study of Democracy. https://escholarship.org/uc/item/4974t33n 2018-04-13

Alexander, Amy C., Ronald Inglehart, & Christian Welzel. (2015). Emancipating sexuality: Breakthroughs into a bulwark of tradition. *Social indicators research*, *129*(2), 909–935. https://doi.org/10.1007/s11205-015-1137-9

Alexander, Amy C., & Christian Welzel. (2007, April 12). *Empowering women: Four theories tested on four different aspects of gender equality* [Conference presentation]. Annual meeting of the Midwest Political Science Association, Palmer House Hotel, Chicago, Illinois, USA.

Alexander, Amy C., & Christian Welzel. (2011). Islam and patriarchy: How robust is Muslim support for patriarchal values? *International Review of Sociology*, *21*(2), 249–276.

Alexander, Amy C., & Christian Welzel. (2015). Eroding patriarchy: The co-evolution of women's rights and emancipative values. *International Review of Sociology*, *25*(1), 144–165.

Aune, Kristin, Mia Lövheim, Alberta Giorgi, Teresa Toldy, & Terhi Utriainen. (2017). Introduction: Is secularism bad for women? *Social Compass*, *64*(4), 449–480. https://doi.org/10.1177/0037768617727464

Benson, Rodney. (2006). News media as a "journalistic field": What Bourdieu adds to new institutionalism, and vice versa. *Political Communication*, *23*(2), 187–202. https://www.doi.org/10.1080/10584600600629802

Benson, Rodney. (2015). Public spheres, fields, networks: Western concepts for a de-westernizing world? In Chin-Chuan Lee (Ed.), *Internationalizing international communication* (pp. 258–280). Ann Arbor, Michigan: University of Michigan Press.

Bourdieu, Pierre. (1998). *On television*. New York: New Press.

Bourdieu, Pierre. (2001). *Masculine Domination*. London: Polity Press.

Byerly, Carolyn M. (Ed.). (2013a). *The Palgrave international handbook of women and journalism*. Basingstoke, UK: Palgrave Macmillan.

Byerly, Carolyn M. (2013b). Factors affecting the status of women journalists: A structural analysis. In Carolyn M. Byerly (Ed.), *The palgrave international handbook of women and journalism* (pp. 11–23). Basingstoke, UK: Palgrave Macmillan.

Cingranelli, David L., David L Richards, & K. Chad Clay. (2014). *The CIRI human rights dataset*. http://www.humanrightsdata.com/p/data-documentation.html

Chen, Gina Masullo, Paromita Pain, Victoria Y.Chen, Madlin Mekelburg, Nina Springer, & Franziska Troger. (2018). 'You really have to have a thick skin': A cross-cultural perspective on how online harassment influences female journalists. *Journalism*, *21*(7), 877–895. https://doi.org/10.1177/1464884918768500

Coppedge, Michael, John Gerring, Staffan I. Lindberg, Svend-Erik Skaaning, Jan Teorell, David Altman, Michael Bernhard, M. Steven Fish, Adam Glynn, Allen Hicken, Carl Henrik Knutsen, Joshua Krusell, Anna Lührmann, Kyle L. Marquardt, Kelly McMann, Valeriya Mechkova, Moa Olin, Pamela Paxton, Daniel Pemstein, Josefine Pernes, Constanza Sanhueza Petrarca, Johannes von Römer, Laura Saxer, Brigitte Seim, Rachel Sigman, Jeffrey Staton, Natalia Stepanova, & Steven Wilson. (2017). *V-dem [country-year/country-date] dataset v7*. Varieties of democracy (V-dem) project.

Coppedge, Michael, Staffan I. Lindberg, Svend-Erik Skaaning, & Jan Teorell. (2015). Measuring high level democratic principles using the V-dem data [Working Paper series 2015:6]. Gothenburg: Varieties of Democracy Institute, University of Gothenburg.

Dahlerup, Drude. (2006). The story of the theory of critical mass. *Politics & Gender*, *2*(4), 511–522. https://doi.org/10.1017/S1743923X0624114X

De Vuyst, Sara. (2020). *Hacking gender and technology in journalism*. London: Routledge. https://doi.org/10.4324/9780429262029

Djerf-Pierre, Monika. (2007). The gender of journalism: The structure and logic of the field in the twentieth century. *Nordicom Review*, *28*(Jubliee Issue), 81–104.

Djerf-Pierre, Monika. (2011). The difference engine: Gender equality, journalism and the good society. *Feminist Media Studies*, *11*(1), 43–51. https://doi.org/10.1080/14680777.2011.537026

Färdigh, Mathias A., Monika Djerf-Pierre, & Maria Edström, with Carolyn M. Byerly, Sarah Macharia, Claudia Padovani, & Karen Ross. (2020). *The GEM dataset, version 1*. Comparing gender and media equality (GEM) project. Gothenburg: Department of Journalism, Media and Communication (JMG), University of Gothenburg.

Gender Links. (2018). *The glass ceilings survey*. https://genderlinks.org.za/wp-content/uploads/2018/10/Glass-Ceilings-2018-Executive-summary-1.pdf

GMMP (Global Media Monitoring Project). (1995–2015). Margaret Gallagher, Sarah Macharia, Lilian Ndangam, Dermot O'Connor, Kasia Seydegart, George Spears, & Media Watch, Canada, World Association for Christian Communication. http://whomakesthenews.org/gmmp/gmmp-reports

Gudipaty, Nagamallika, Jyotika Ramaprasad, Svetlana Pasti, Cláudia Lago, Xianzhi Li, & Ylva Rodny-Gumede. (2017). Gender: Towards equality? In Svetlana Pasti, & Jyotika Ramaprasad (Eds.). *Contemporary BRICS journalism: Non-western media in transition*. London: Routledge. https://doi.org/10.4324/9781315440927

Hallin, Daniel C, & Paolo Mancini. (2004). *Comparing media systems: Three models of media and politics*. New York: Cambridge University Press. https://doi.org/10.1017/CBO9780511790867

Hanitzsch, Thomas, & Folker Hanusch. (2012). Does gender determine journalists' professional views? A reassessment based on cross-national evidence. *European Journal of Communication*, *27*(3), 257–277. https://doi.org/10.1177/0267323112454804

Hanitzsch, Thomas, Folker Hanusch, Jyotika Ramaprasad, & Arnold S. de Beer. (Eds.). (2019a). *Worlds of journalism: Journalistic cultures around the globe* [Kindle edition]. New York: Columbia University Press.

Hanitzsch, Thomas, Laura Ahva, Martin Oller Alonso, Jesus Arroyave, Liesbeth Hermans, Jan Fredrik Hovden, Sallie Hughes, Beate Josephi, Jyotika Ramaprasad, Ivor Shapiro, & Tim P. Vos. (2019b). Journalistic cultures in a global context: A conceptual roadmap. In Thomas Hanitzsch, Folker Hanusch, Jyotika Ramaprasad, & Arnold S. de Beer (Eds.), *Worlds of journalism: Journalistic cultures around the globe* [Kindle edition] (pp. 23–46). New York: Columbia University Press.

Inglehart, Ronald, & Pippa Norris. (2003). *Rising tide: Gender equality and cultural change around the world*. Cambridge: Cambridge University Press.

Inglehart, Ronald, Pippa Norris, & Christian Welzel. (2002). Gender equality and democracy. *Comparative Sociology*, *1*(3–4), 321–345.

IPU (Inter-Parliamentary Union). (n.d.). *Statistical archive: Women in national parliaments*. http://archive.ipu.org/wmn-e/world-arc.htm Kanter, Rosabeth Moss. (1977a). *Men and women of the corporation*. New York: BasicBooks.

Kanter, Rosabeth Moss. (1977b). Some effects of proportions on group life: Skewed sex ratios and responses to token women. *American Journal of Sociology*, *82*(5), 965–990.

Löfgren-Nilsson, Monica, & Henrik Örnebring. (2016). Journalism under threat: Intimidation and harassment of Swedish journalists. *Journalism Practice*, *10*(7), 880–890. https://doi.org/10.1080/17512786.2016.1164614

Lobo, Paula, Maria João Silveirinha, Marisa Torres da Silva, & Filipa Subtil. (2017). "In journalism, we are all men": Material voices in the production of gender meanings. *Journalism Studies*, *18*(9), 1148–1166. https://doi.org/10.1080/1461670X.2015.1111161

Lundgren, Åsa (2015). Knowledge production and the world values survey: Objective measuring with ethno-centric conclusions. In Inga Brandell, Marie Carlsson, & Önver A. Cetrez (Eds.), *Borders and the changing boundaries of knowledge* [Transactions vol. 22] (pp. 35–52). Stockholm: Swedish Research Institute in Istanbul.

Löfgren-Nilsson, Monica. (2010). "Thinkings" and "doings" of gender: Gendering processes in Swedish television news production. *Journalism Practice*, *4*(1), 1–16. https://doi.org/10.1080/17512780903119693

Macharia, Sarah. (Ed.). (2015). *Who makes the news? Global Media Monitoring Project 2015*. World Association for Christian Communication (WACC). http://whomakesthenews.org/gmmp/gmmp-reports/gmmp-2015-reports

Malhotra, Anju, Sidney Schuler, & Carole Boender. (2002). *measuring women's empowerment as a variable in international development*. World Bank Workshop on Poverty and Gender, Washington, DC, USA. http://siteresources.worldbank.org/INTGENDER/Resources/MalhotraSchulerBoender.pdf

Mellado, Claudia. (Ed.). (2020). *Beyond journalistic norms: Role performance and news in comparative perspective*. London: Routledge.

McLaren, Margaret A. (2019). Global gender justice: Human rights and political responsibility. *Critical Horizons*, *20*(2), 127–144. https://doi.org/10.1080/14409917.2019.1596212

Melin, Margareta. (2008). *Gendered journalism cultures: Strategies and tactics in the fields of journalism in Britain and Sweden*. Gothenburg: Department of Journalism, Media and Communication (JMG), University of Gothenburg. https://www.diva-portal.org/smash/get/diva2:1404351/FULLTEXT01.pdf

Moi, Toril. (1999). Appropriating Bourdieu: Feminist theory and Pierre Bourdieu's sociology of culture. In Toril Moi, *What is a woman? And other essays*. London: Oxford University Press.

Mosedale, Sarah. (2005). Assessing women's empowerment: Towards a conceptual framework. *Journal of International Development*, *17*(2), 243–257.

Norris, Pippa, & Ronald Inglehart. (2001). Cultural obstacles to equal representation. *Journal of Democracy*, *12*(3), 126–140.

North, Louise. (2009). Gendered experiences of industry change and the effects of neoliberalism. *Journalism Studies*, *10*(4), 506–521. https://doi.org/10.1080/14616700902783911

North, Louise. (2016). The gender of "soft" and "hard" news. *Journalism Studies*, *17*(3), 356–373. https://doi.org/10.1080/1461670X.2014.987551

Nussbaum, Martha C. (1999). *Sex and social justice* [Kindle edition]. Oxford: Oxford University Press.

PEW (Pew Research Center). (2015, April 2). *The future of world religions: Population growth projections, 2010–2050.* http://www.pewforum.org/2015/04/02/religious-projections-2010-2050/

Reynolds, Andrew. (1999). Women in the legislatures and executives of the world: Knocking at the highest glass ceiling. *World Politics*, *51*(4), 547–572.

Ross, Karen, & Claudia Padovani. (Eds.). (2017). *Gender equality and the media: A challenge for Europe*. London: Routledge.

Rothstein, Bo. (2018). Fighting systemic corruption: The indirect strategy. *Daedalus*, *147*(3), 35–49. https://doi.org/10.1162/daed_a_00501

Scott, Catherine W. (1996). *Gender and development*. London: Lynne Rienner Publishers.

Steiner, Linda. (2012). Failed theories: Explaining gender difference in journalism. *Review of Communication*, *12*(3), 201–223. https://doi.org/10.1080/15358593.2012.666559

Stockemer, Daniel, & Aksel Sundström. (2016). Modernization theory: How to measure and operationalize it when gauging variation in women's representation? *Social Indicators Research*, *125*(2), 695–712.

Sundström, Aksel, Pamela Paxton, Yi-ting Wang, & Staffan I. Lindberg. (2015). *Women's political empowerment: A new global index, 1900–2012* [Working paper series 2015:19]. Gothenburg: The Varieties of Democracy (V-dem) Institute, University of Gothenburg.

Teorell, Jan, Stefan Dahlberg, Sören Holmberg, Bo Rothstein, Anna Khomenko, & Rickard Svensson. (2017). *The quality of government standard dataset, version Jan17*. Gothenburg: The Quality of Government (QoG) Institute, University of Gothenburg. https://doi.org/10.18157/QoGStdJan17

UNESCO. (2012). Gender sensitive indicators for the media: Framework of indicators to gauge gender sensitivity in media operations and content. Paris: UNESCO.

WEF (World Economic Forum). (2020). The global gender gap index 2020. http://reports.weforum.org/global-gender-gap-report-2020/the-global-gender-gap-index-2020/

Welzel, Christian (2013). *Freedom rising: Human empowerment and the quest for emancipation.* New York: Cambridge University Press.

Welzel, Christian. (2014). Evolution, empowerment, and emancipation: How societies climb the freedom ladder. *World Development*, *64*, 33–51.

van Zoonen, Liesbet. (1994). *Feminist Media Studies*. London: Sage.

Vickery, Jacqueline Ryan, & Tracy Everbach. (Eds.). (2018). Mediating misogyny: Gender, technology, and harassment. Cham, Switzerland: Palgrave MacMillan. https://doi.org/10.1007/978-3-319-72917-6

WVS (World Values Survey). (1981–2014). Longitudinal Aggregate (v.20150418). World Values Survey Association [Aggregate File Producer: JDSystems, Madrid, Spain]. www.worldvaluessurvey.org

Zuiderveld, Maria. (2017). *Battling the 'Invisible Nets': Gender in the fields of journalism in sub-Saharan Africa*. Gothenburg: Department of Journalism, Media and Communication (JMG), University of Gothenburg. http://hdl.handle.net/2077/52127

Örnebring, Henrik, & Cecilia Möller. (2018). In the margins of journalism: Gender and livelihood among local (ex-)journalists in Sweden. *Journalism Practice*, *12*(8), 1051–1060. https://doi.org/10.1080/17512786.2018.1497455

Örnebring, Henrik, Michael Karlsson, Karin Fast, & Johan Lindell. (2018). The space of journalistic work: A theoretical model. *Communication Theory*, *28*(4), 403–423. https://doi.org/10.1093/ct/qty006

Appendix 4.1 Variables and data sources

The pooled GEM dataset is compiled in the project Comparing Gender and Media Equality Across the Globe (Färdigh et al, 2020). The GEM datasets include variables from several different sources. To allow for proper identification across studies and to link each variable to its original source, each variable name has been assigned a prefix that contains a reference to the original data set followed by the original variable name. All independent variables in the analyses have been rescaled to range between 0 and 1.

Variables from the Global Media Monitoring Project

The indicators used in this chapter to measure the gender representation in the news are retrieved from the Global Media Monitoring Project (GMMP) 2005, 2010, and 2015. GMMP collects empirical evidence of gender in news content and changes over time through one-day snapshots taken every five years. The media monitoring has been carried out every five years since 1995, expanding from 71 to 114 participating countries in 2015. The number of news outlets and news stories sampled by each participating country, depending on its population and the number of available news media outlets. The aim is to include a sample news outlet that is representative of each country's news media sector. The Gender Equality in the News Media Index (GEM-I) calculates the average gender gap in the news (percentage of women – percentage of men) for the following six indicators retrieved from the GMMP reports:

- women and men as news subjects or sources (all people in the news) (gmmp_gons_f, gmmp_gons_m)
- women and men as reporters (in all types of stories) (gmmp_gor_f, gmmp_gor_m)
- women and men as news subjects or sources in economy and business news (gmmp_gonseb_f, gmmp_gonseb_m)
- women and men news subjects or sources in politics and government news (gmmp_gonspg_f, gmmp_gonspg_m)

- women and men as spokespersons (speaks on behalf of another person, a group, or an organisation)((gmmp_fonssp_f, gmmp_fonssp_m)
- women and men as experts (provides information, opinion, or comment, based on specialist knowledge) (gmmp_fonse_f, gmmp_fonse_m)

Variables from the United Nations Development Programme

The Gender Inequality Index (GII) score (undp_hdi_gii) measures gender inequalities in achievements in three dimensions of inequality between women and men: reproductive health (maternal mortality and adolescent birth rate); empowerment (population with at least secondary education and share of parliamentary seats); and the labour market (labour force participation rates). The scale ranges between 0 (equality) and 1 (inequality).

Variables from the Pew Research Center

The religious composition by country is based on survey data conducted by the Pew Research Center. The measures are based on religious self-identification. For survey questions, data are reported for different religious groups. Religious affiliation is determined based on a respondent's answer to the following question:

- "What is your present religion, if any? Are you [response options are modified by survey country]?"

Data was collected in 2010. The unaffiliated score is termed irreligion and used as an indicator of secularism:

- irreligion (share of population with no religious affiliation 2010) (pew_rel_unaff)

Variables from the Quality of Government Institute

A range of variables are retrieved from The Quality of Government (QoG) dataset (Teorell et al., 2017) published by the QoG Institute, which offers a range of datasets on indicators of quality of government and all things related.

The Global Gender Gap Index (GGI) score (qog_wef_ggi_score) is developed by the World Economic Forum (WEF) and included in the QoG dataset. The GGI measures the gap between men and women in four fundamental categories (sub-indexes). All indicators are measured as ratios, that is, outcomes for females in relation to outcomes for men. The four sub-indexes include:

- economic participation and opportunity (female labour force participation, wage equality between women and men for similar work, female estimated earned income, female legislators, senior officials and managers,

female professional and technical workers)

- educational attainment (literacy, net primary enrolment, net secondary enrolment, gross tertiary enrolment)
- health and survival (sex ratio at birth, healthy life expectancy)
- political empowerment (seats in parliament, ministerial level, number of years with female head of state over male value)

The indicators for women's economic rights (qog_ciri_wecon) and women's political rights (qog_ciri_wopol) were originally retrieved from Cingranelli and colleagues' (2014) Human Rights Dataset. The indicators set out to measure 1) the extensiveness of flaws pertaining to women's rights and 2) government practices towards women, or how effectively the government enforces the laws. The scale varies from 0, which indicates there are no economic or political rights for women under law, and systematic discrimination based on sex may be built into the law, to 3, which indicates that all, or nearly all, of women's economic and political rights are guaranteed by law.

Education for women is measured with the following indicators:

- Education for women, average schooling years for population aged 25+ (qog_bl_asy25fm) measures the mean schooling years for the population, aged 25 or older.
- Education for women, average schooling years for women aged 25+ (qog_bl_asy25f) measures the mean schooling years for women, aged 25 or older.

Women in parliament, the share of women in the lower house (qog_ipu_l_sw) is originally compiled by the Inter-Parliamentary Union (IPU) on the basis of information provided by national parliaments. It measures the share of women in lower or single houses of parliament (in percentages).

The democracy index (qog_fh_ipolity2) measures the level of democracy in a country and is originally retrieved from Freedom House/Polity. This version includes imputed values. The scale ranges from 0–10, where 0 is least democratic and 10 most democratic.

The Human Development Index (HDI) (qog_undp_hdi) is originally produced by the UNDP and it is a summary measure of average achievement in key dimensions of human development: 1) having a long and healthy life, 2) being knowledgeable, and 3) having a decent standard of living. The HDI is the geometric mean of normalised indices for each of the three dimensions. The health dimension is assessed by life expectancy at birth. The education dimension is measured by mean of years of schooling for adults aged 25 years and more, and expected years of schooling for children of school entering age. The standard of living dimension is measured by gross national income (GNI) per capita. The HDI uses the logarithm of income to reflect the diminishing importance

of income with increasing GNI. The scores for the three HDI dimension indices are then aggregated into a composite index using geometric mean.

The freedom of the press score (qog_fh_fotpsc) is published and provided to QoG by Freedom House. This index assesses the degree of print, broadcast, and digital media freedom in different countries and territories. The index score can range from 0 (most free) to 100 (least free). However, in the analyses in Chapter 4, the scale is reversed so that higher numbers equal more freedom. The measure includes three sub-indices (also reversed in the analysis):

- Freedom from legal restrictions measures the legal environment for the media, both the laws and regulations that could influence media content and the government's inclination to use these laws and legal institutions to restrict the media's ability to operate. The scale is 0–30 (0 indicates more freedom).
- Freedom from political pressures that influence reporting measures the degree of political control over the content of news media, including the editorial independence of both state-owned and privately owned media; access to information and sources; official censorship and self-censorship; the vibrancy of the media; the ability of both foreign and local reporters to cover the news freely and without harassment; and the intimidation of journalists by the state or other actors, including arbitrary detention and imprisonment, violent assaults, and other threats. The scale is 0–40 (0 indicates more freedom).
- Freedom from economic influences that affect access to news and information, including the structure of media ownership, measures the transparency and concentration of ownership; the costs of establishing media as well as of production and distribution; the selective withholding of advertising or subsidies by the state or other actors; the impact of corruption and bribery on content; and the extent to which the economic situation in a country impacts the development of the media. The scale is 0–20 (0 indicates more freedom).

Variables from the World Values Survey

All the values variables were retrieved from the World Values Survey (WVS, 1981–2014). The individual level WVS data have been aggregated to the country level, thus constructing new country-level aggregate variables (applying the country-weights supplied with the WVS dataset). The values scales are indices and can range between 0 and 1. The different values scales are developed by Christian Welzel (2013) for the WVS (also drawing from Inglehart & Norris, 2003):

- Gender equality values (wvs_EQUALITYmean_t) is measured as the country-level mean of the equality scale.

- Choice values (wvs_CHOICEmean_t) is measured as the country-level mean of the choice scale.
- Disbelief values (wvs_DISBELIEFmean_t) is measured as the country-level mean of the disbelief scale.

Gender equality values is measured by three items, indicating how strongly respondents disagree with the following statements:

- "Education is more important for a boy than a girl".
- "When jobs are scarce, men should have priority over women to get a job".
- "Men make better political leaders than women".

Choice values measures how strongly people value freedom in their reproductive and sexual choices, using three items indicating how acceptable respondents find 1) divorce, 2) abortion, and 3) homosexuality.

Disbelief values – called agnosticism by Welzel (2013) and labelled disbelief in the WVS dataset – measures the extent to which an individual distances themselves from religious authority, using three items: 1) whether a person describes theirself as a "religious person", 2) whether a respondent mentions "faith" as an important child quality, and 3) how frequently a respondent attends religious services. Refusal to describe oneself as a religious person, not mentioning faith, and abstention from religious services are defined as secular positions in the domain of religious authority.

Variables from the Varieties of Democracy Project

The Varieties of Democracy (V-dem) dataset (Coppedge et al., 2017) covers 177 countries from 1900–2016 on a broad range of indicators of democracy, political systems as well as elections, women's political empowerment (Sundström et al., 2015; Stockemer & Sundström, 2016), and civil society participation. The indicators in the V-dem dataset are based on factual information obtainable from official documents as well as subjective assessments by country experts. A minimum of five country experts is used for each country-variable-year. Most variables are measured on an ordinal scale, but are converted to an interval scale by the specific measurement model used by V-dem.

- GDP per capita, logged base 10 (vdem_mad_gdppcln) is a measure of the country's economic prosperity and development.
- Media integrity is an index constructed by the present author specifically for this study, to obtain a unitary measure of the integrity of the media field in different countries; it gauges to what extent the media are able to maintain their autonomy and face off government pressures,

censorship, corruption, harassment, and political biases. It consists of the mean of eight variables from the V-dem dataset (Cronbach's alpha for the variables included in the index is .964):

1. Media bias (vdem_mebias) measures if there is media bias against opposition parties or candidates.
2. Internet censorship effort (vdem_mecenefi) gauges if there are government attempts to censor information (text, audio, or visuals) on the Internet.
3. Media censorship effort (vdem_mecenefm) measures if the government directly or indirectly attempts to censor the print or broadcast media.
4. Media corruption (vdem_mecorrpt) estimates to what extent corrupt acts or behaviours are prevalent in the media.
5. Critical print/broadcast media (vdem_mecrit) measures if the major print and broadcast outlets routinely criticise the government.
6. Harassment of journalists (vdem_meharjrn) measures if journalists are threatened with libel, arrested, imprisoned, beaten, or killed.
7. Print/broadcast media perspectives (vdem_merange) estimates if major print and broadcast media represent a wide range of political perspectives.
8. Media self-censorship (vdem_meslfcen) measures if there is self-censorship among journalists when reporting on issues that the government considers politically sensitive. The variable is rescaled to range from 0 (least integrity) to 1 (most integrity).

- Women journalists (vdem_mefemjrn) estimates the percentage of journalists in the print and broadcast media who are women. A caveat with this measure is that many countries lack reliable data on the gender composition of the country's journalists. However, this is the best estimate given by V-dem's country experts.

Variables from Worlds of Journalism

The Worlds of Journalism (WoJ) study (Hanitzsch et al., 2019) is a survey of 27,500 journalists in 67 countries, collected between 2012–2016.

- Editorial autonomy (woj_AUTONOMY) measures how much freedom journalists say they have in selecting stories and choosing which aspects to emphasise (5 = complete freedom; 4 = a great deal of freedom; 3 = some freedom; 2 = little freedom; 1 = no freedom at all).

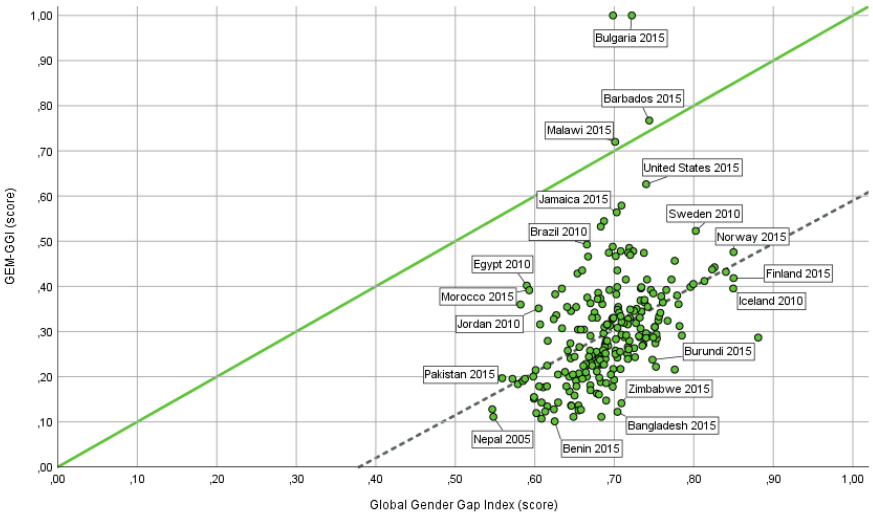
The various influences on journalists' work were also measured, and the answers encapsulated in indices. From a list of potential sources of influence, journalists

were asked to state how much influence each of them has on their work (5 = extremely influential; 4 = very influential; 3 = somewhat influential; 2 = little influential; 1 = not influential):

- Political influences (woj_INFL_POL): means of politicians; government officials; pressure groups; and business representatives.
- Organisational influences (woj_INFL_ORG): means of managers of news organisation; supervisors and higher editors; owners of news organisation; and editorial policy.
- Procedural influences (woj_INFL_PRO): means of information access; journalism ethics; media laws and regulation; available news-gathering resources; and time limits.
- Economic influences (woj_INFL_ECO): means of profit expectations; advertising considerations; and audience research and data.
- Personal networks (woj_INFL_PER): means of friends, acquaintances, and family; colleagues in other media; and peers on the staff.

Appendix 4.2 Additional figure and table

Figure 4.4 *Global Gender Gap Index and GEM-GAP*



Comments: Number of country-year observations = 233 (observations with limited data for the GEM-I are excluded – two country-year observations). The data for the GEM-I indicators are from the GMMP study (2005, 2010, & 2015). In the graph, the GEM-I is recalculated to form the GEM-GGI to measure the gender gap in the same way and on the same scale as the Global Gender Gap Index (GGI) (share of women / share of men). A 50/50 distribution between men and women would thus result in a GEM-GGI of 1. The GEM-GGI thus ranges between 0 and 1, with 1 indicating full gender parity. The GGI was first published by the WEF in 2006, and to match the GGI with the GMMP, the GGI scores for 2006 are matched with GMMP for 2005. The GGI ranges between 0 (women have 0% of men's attainment and resources in all areas) and 1 (women have 100% of men's attainment and resources in all areas), with 0.5 indicating that women have 50 per cent of the attainment and resources men have access to. Pearson's $r = .424$ ($p < .001$), $b = .95$ ($p < .001$), $R^2 = .179$ ($p < .001$). Equation for the fitted regression line (dotted line): GEM-GAP = -0.36 + 0.95 × GGI. The green line shows the relationship if the GEM-GGI would fully correspond with the GGI. See Appendix 4.1 for more information about the variables.

Source: GMMP; QoG (original data from WEF)

Table 4.5 *Gender equality in the news media (GEM-I score) regressed on the Global Gender Gap Index, GDP per capita, women journalists, freedom of the press, year, and region*

	Model 4.1 OLS	Model 4.2 OLS (with region dummies)
Global Gender Gap Index (score)	21.5** (7.7)	22.8** (7.7)
GDP per capita (logged, base 10)	-4.8 (6.5)	-19.8* (9.3)
Women journalists	33.6** (11.1)	30.9* (12.0)
Freedom of the press	8.4 (5.3)	11.4# (5.8)
Year (reference category = 2005)		
2010	6.4*** (1.6)	7.2*** (1.7)
2015	5.5** (1.9)	6.5** (2.0)
Region (reference category = Africa)		
Asia		3.5 (2.8)
Pacific		4.0 (5.1)
Europe		8.8* (3.8)
Middle East		9.3# (4.9)
Caribbean		9.8* (4.7)
Latin America		11.5*** (2.8)
North America		19.2** (6.4)
Constant	-89.2*** (4.4)	-89.1*** (4.9)
n	218	218
Std errors	Clustered robust cluster = country	Clustered robust cluster = country
Number of clusters (countries)	103	103
Adjusted R^2	.366***	.430***

Comments: TS-GEM dataset. *n* = country-year observations (country-year observations with limited data are excluded). #$p < .10$, *$p < .05$, **$p < .01$, ***$p < .001$. OLS regression, robust clustered standard errors (cluster = country), unstandardised regression coefficients. All independent variables have been rescaled to range between 0 and 1. The GEM-I can vary between -100 (only men in the news) and +100 (only women in the news). Indicators in the GEM-I are retrieved from the GMMP study (2005, 2010, & 2015). Year = 2005 (reference category). The GGI was first published by the WEF in 2006, and to match the GGI with the GMMP, the GGI scores for 2006 are matched with GMMP for 2005. See Appendix 4.1 for more information about the variables. See also Note 8 for a further methodological discussion.

Source: GMMP; QoG (original data from Freedom House & WEF); V-dem

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