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A collage of images related to media and development. The top part shows a news anchor in a studio, a television screen displaying a person under a white cloth, and two young children. The middle part shows a large crowd of people. The bottom part shows two people working together at a desk.

# Press freedom and development

An analysis of correlations between freedom  
of the press and the different dimensions  
of development, poverty, governance and peace

Marina Guseva – Mounira Nakaa – Anne-Sophie Novel

Kirsi Pekkala – Bachir Souberou – Sami Stouli



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# The project

## The project

**T**his study is the outcome of a research project implemented by the Centre for Peace and Human Security (CPHS) at Sciences Po University with support by UNESCO. The initial idea was to gather and collate quantitative and qualitative evidence of correlations between the indicators of environments conducive to media freedom and independence and the indicators of human development, human security, stability, poverty reduction, good governance and peace. The research team was set up and headed by Anne-Sophie Novel. The students were recruited on the basis of their master's degree specialization (development, economics of international relations or conflict and security), their experience outside the university setting and their professional outlook. Collaboration between UNESCO and Sciences Po University (CPHS and GEM) was centred around seminars devised for the research team and organized by the members of each institute and also regular discussions and meetings between all project participants. The team split the work according to the skills, aptitudes and aspirations of each, with some learning to apply econometric tools and others attempting empirical analyses, the aim being to develop a tool for UNESCO rather than to write an academic paper.

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# Abstract

## Abstract

The influence of a free press on development has never been properly assessed. It is difficult, if not impossible, to calculate such impact. However, correlations between freedom of the press and the different dimensions of societies' development in the broad sense can be perceived through simple econometric regressions. While no conclusion can be reached as to the existence of causality between freedom of the press and the different variables explored, all the findings confirm the importance of press freedom for development. A free press always has a positive influence, whether it be on poverty and its different aspects (monetary poverty and access to primary commodities, health and education), on governance or on violence and conflict issues. It serves as an intermediary between individuals and government, informing the latter of people's needs and acting as a buffer against crises and situations of extreme deprivation; it holds governments accountable and makes their actions more transparent; and, along with other indicators of good governance, it creates a business-enabling environment, a climate conducive to more effective public affairs management, and so forth. The results thus suggest that a freer press can contribute to achievement of the Millennium Development Goals and, most importantly, to attainment of an acceptable and viable level of development. By promoting freedom of the press, States and international organizations provide themselves with a powerful development tool. A free press constitutes an instrument of development as such, in the same way as education or investment.

# Contents

<b>Preface</b>	<b>9</b>
<b>Foreword</b>	<b>11</b>
<b>Introduction</b>	<b>13</b>
<b>Freedom of the press</b>	<b>13</b>
Freedom of expression and press freedom: some definitions	13
Indicators of press freedom	15
<b>Dimensions of development</b>	<b>16</b>
Human development	16
Human poverty	19
Human security	20
Human rights	23
Approach framework adopted	25
<b>Methodology</b>	<b>30</b>
hypotheses	30
Indicators	31
<b>Freedom of the press, development and poverty</b>	<b>37</b>
<b>Preamble: press freedom, HDI and HPI</b>	<b>38</b>

<b>Freedom of the press and decent standards of living</b>	<b>42</b>
Press freedom and monetary poverty	43
Press freedom and inequalities	47
Press freedom and primary needs	49
Summary of links between press freedom and decent living conditions	50
Press freedom and health	51
Press freedom and health status (life expectancy and infant mortality)	53
Press freedom and health expenditure	54
Press freedom and health resources	57
Press freedom and HIV prevention	60
Summary of the links between press freedom and health indicators	63
<b>Press freedom and education</b>	<b>64</b>
Press freedom and the education index	65
Press freedom and the different education indicators	68
Summary of the links between press freedom and education indicators	73
<b>Press freedom and governance</b>	<b>77</b>
<b>Press freedom, rights and political accountability</b>	<b>70</b>
<b>Press freedom and institutions</b>	<b>81</b>
Press freedom and government effectiveness	81
Press freedom and regulation	82
Summary of the links between press freedom and institutions	84
<b>Press freedom and the rule of law</b>	<b>84</b>
Press freedom and the legal framework	84
Press freedom and corruption	86
Summary of the links between press freedom and the legal environment	90
<b>Summary of the links between press freedom and governance</b>	<b>88</b>



<b>Press freedom and violence</b>	<b>91</b>
<b>Press freedom and the degree of State militarization</b>	<b>92</b>
Press freedom and military expenditure	93
Press freedom and military personnel	95
Summary of links between press freedom and militarization	96
<b>Freedom of the press, (in)security and violence</b>	<b>97</b>
Press freedom and refugees by country of origin	98
Press freedom and homicide	99
<b>Summary of links between press freedom and violence</b>	<b>103</b>
<b>Conclusion, appreciations and recommendations</b>	<b>107</b>
<b>Overview of the approach used</b>	<b>107</b>
<b>Interpreting the conclusion</b>	<b>109</b>
<b>Suggestions for further work</b>	<b>111</b>
<b>Annexes</b>	<b>115</b>
Country codes (ISO 3, World Bank)	115
Indicators used in regressions	118
Public expenditure on health and press freedom	120
Comparisons of Pippa Norris's results with those of this study	121
<b>Abbreviations and acronyms</b>	<b>125</b>
<b>Bibliography</b>	<b>127</b>

# Preface

## Preface

The links between free press and development are evident. Over the last two decades, success stories of people empowered through the free flow of ideas and by access to information and knowledge have been accompanied by many resolutions and authoritative statements by international bodies on the importance for sustainable development of an environment enabling free, pluralistic and independent media. Therefore, supporting freedom of expression has been increasingly considered as a mean to promote human development, security, participation, accountability, good governance and therefore ultimately as a way to contribute to poverty reduction...

Despite the plethora of empirical evidence about the nexus between free press and development the amount of quantitative and qualitative data and literature scientifically analyzing this relationship is limited. This may be due to the fact that it is difficult to set down concepts like free press, development, security or good governance in scientific terms. And even more challenging it is any attempt to compare them and to objectively determine their respective influence.

This is why UNESCO, as the only UN body with a specific mandate to defend freedom of expression and press freedom, has supported, among other efforts to understand the impact of media freedom, this study undertaken by the Centre for Peace and Human Security (CPHS) at Paris-based Institute for Political Studies (IEP - Sciences Po). The research has sought to use various econometric tools and data from world-renowned institutions to investigate the relationship between free press and development and to ascertain a correlation between the two.

Certainly, main results confirm the importance of press freedom for development. According to the authors' conclusions, the analysis suggests that «there is a “good” correlation between press freedom and the different dimensions of development, poverty and governance.» In particular, press freedom is positively

correlated with most of the dimensions of human development, economic security, education, food and health. Along with other indicators of good governance, it creates the environment favourable for sustainable development.

These encouraging findings therefore furthermore corroborate the assertion that a widespread media access and independent free press can contribute to attainment of the Millennium Development Goals. Finally, these results of the study lend scientific validation to the efforts of the freedom of expression advocates throughout the world.

As we are approaching to mark the 60th anniversary of the Universal Declaration of Human Rights, not only can we celebrate all the efforts made to promote its article 19 recognizing freedom of expression, but we can also, according to a rights-based approach, demonstrate the critical role that the promotion of press freedom has played in the various dimensions of sustainable and human development. Hopefully these results will encourage even greater strides to defend and actively promote freedom of the press.

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Paris, December 2007

# Foreword

## Foreword

“A question arises on the nature of wealth and, since it is possible to discuss things one does not possess and not having a penny to my name, I write a piece about the value of money and its net product [...]. How I would like to get my hands on one of those jumped-up officials – so thoughtless about the evils they cause – after a disgrace of his own has curbed his pride! I would tell him ... that the idiocies which appear in print acquire importance only when they are restricted; that, without the freedom to criticize there can be no praise and that only petty men fear petty scribblings.”

Beaumarchais, *The Marriage of Figaro* (Act V, Scene 3), 1784<sup>1</sup>

According to Emmanuel Kant, the great philosopher of the Age of Enlightenment, an enlightened and developed society composed of free and independent individuals cannot be created unless all its members are afforded freedom of expression.<sup>2</sup> In the view of economics Nobel prize-winner Amartya Sen, the basis of democracy is diversity in all its forms and freedom of expression is its main element.<sup>3</sup> According to yet many other authors, and to parody Figaro's famous line, without freedom of expression there can be no criticism and thus no free and developed society.

Freedom of expression is essential to the exercise of all other rights. Without it, peoples cannot be aware of their rights and, less still, secure respect for them. It is also fundamental to combating the many human rights violations across the world<sup>4</sup>.

1. In this scene, Figaro, wounded by the claims of Count Almaviva, gives vent to his resentment and pleads his own cause, recounting his life as an author and journalist.
2. "Answering the question: What is Enlightenment?", Emmanuel Kant, September 1784.
3. *La démocratie des autres. Pourquoi la démocratie n'est pas une invention de l'Occident*, Amartya Sen, 2005, 86 pp. According to Sen, a country does not have to be deemed mature for democracy but should rather reach maturity through democracy.
4. See Article 19, International Centre against Censorship, a non-governmental organization based in London, at: <http://www.unesco.org/bpi/fre/3mai98/art-19.htm>

# Introduction

## Introduction

**F**reedom of the press depends on a vast array of factors. As a social and occupational construct upheld by law, it cannot exist as such unless the people have the means to access it (education, technology, protection of journalists, etc.). Since it is crucial for the individual, society, the economy and the democratic system as a whole to have sound conditions of information access, the existence of a correlation between levels of human development and degrees of press freedom appears obvious. This introduction aims to set out in turn the concepts of press freedom and human development and the methodology adopted in this study.

## Freedom of the press

### Freedom of expression and press freedom: some definitions

Freedom of the press is a derivative of the fundamental right constituted by freedom of information. As stated in resolution 59 (I) adopted by the General Assembly of the United Nations at its first session in 1946, "[f]reedom of information is a fundamental human right and the touchstone of all the freedoms to which the

United Nations is consecrated. Freedom of information implies the right to gather, transmit and publish news anywhere and everywhere without fetters. As such it is an essential factor in any serious effort to promote the peace and progress of the world". The premise that "[u]nderstanding and cooperation among nations are impossible without an alert and sound world opinion" also constitutes an essential freedom, for which press freedom is a key vehicle. Article 19 of the Universal Declaration of Human Rights further asserts this freedom by stressing that "[e]veryone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers". The free flow of ideas is essential to societies so that peoples can understand one another and the sharing of knowledge can advance. International agreements and institutions such as UNESCO make it possible to uphold such free flow of words and images.

In order to be free, the press has to be independent and pluralistic: independent of governmental, political or economic control or of control of materials essential for its production and dissemination, and pluralistic through the absence of media monopolies and the existence of the greatest possible number of newspapers, magazines and periodicals reflecting the widest possible range of opinion within the community.<sup>6</sup> To that end it is necessary for States to ensure transparency and accessibility of information, for the media to develop within an independent, viable, pluralistic and professional environment and for legal guarantees of which the public is aware to ensure right of access to information. Journalists must also be free to practise their profession, in particular when investigating corruption, without facing pressures such as assault, harassment, arrest and imprisonment.<sup>7</sup> It can readily be appreciated that, in addition to the need for access to information and legislation to guarantee its existence, freedom of expression and press freedom are essential to the development of societies and of human beings. As explained by Pippa Norris (2002), the press has three well-defined functions that should always be remembered: a watchdog function, a civic forum function and an agenda-setting function.

## Indicators of press freedom

Assessing freedom of the press is not a straightforward task. There are currently only two main indicators of press freedom. The first was developed by Freedom House. As the only source of regular information on the subject since 1979, this index is the most widely used. The second was developed by Reporters Without Borders (RWB) in 2002.

The Freedom House index refers to three criteria for evaluating press freedom in 194 countries across the world: legal environment (examination of laws and regulations that could influence media content but also the government's inclination to use those laws to restrict the media's ability to operate), political influence (degree of political control over information) and economic pressures (economic barriers to entry to the media sector, impact of corruption). The index score allotted to a country ranges from 0 to 100 depending on the extent of the constraints on press freedom.<sup>9</sup> A score of between 0 and 30 indicates that the press is free; a score of between 31 and 60 indicates that it is only partly free and a score above 61 means that it is not free.

The RWB index uses a different assessment approach from that adopted by Freedom House. It focuses primarily on attacks and threats against journalists (imprisonment, torture and murder) or the media (censorship and confiscation) and covers 167 countries.<sup>9</sup> The legal situation and the behaviour of the authorities are also taken into account. However, it is difficult to tell whether the index takes economic criteria into consideration in the assessment of States' conduct. The RWB ranking is thus relative: it assesses the degree of freedom of one country's media in relation to that of the others and thus avoids the "arbitrary" ranking of Freedom House.

The ranking scores arrived at are ultimately different but relatively similar, bearing in mind RWB's insistence that its ranking makes no judgment as to the quality of the press (**table 1**).

It would have been interesting to use the RWB index in this study but that option was finally rejected. The indicators are too recent and too few to be employed. This analysis of correlations between press freedom and development



thus uses an average of the press freedom indicators developed by Freedom House between 1996 and 2004.

**Table 1. European countries: comparison of Reporters without Borders (RWB) and Freedom House (FH) rankings (2003)**

See annex for country codes.

	S	B	FIN	DK	L	D	NL	P	E	IRL	F	UK	A	GR	I
FH	1	2	3	4	5	6	6	9	9	9	11	12	13	14	14
RWB	6	4	1	3	–	5	1	11	13	8	9	10	7	12	14

## Dimensions of development

The purpose of this study is to examine the links between press freedom and development. The notion of “development” as such is too broad to be usable in the approach envisaged here. The excessive attention paid to increased wealth and material prosperity has gradually masked the very nature of nations’ wealth, i.e. the human being. The aim of this section is to set out the main concepts covered by the term “development” and explain the sense in which it is used here.

### Human development

#### Human development theories

Human development is a concept whose primary objective is to promote human freedoms, for example by increasing the choices offered to individuals, enabling them to live a full life and benefit from factors of progress and what they generate. Human development is both a process of expanding people’s choices and the outcome of the choices that it offers them. The *Human Development Reports* (HDRs) published since 1990 are based on Amartya Sen’s capability theory (box 1) and focus on “four important capabilities: to lead a long and healthy life, to

be knowledgeable, to have access to the resources needed for a decent standard of living, and to participate in the life of the community".<sup>10</sup> Human development is development of the people, development for the people and development by the people.<sup>11</sup> This means being free, being what one wants to be and doing what one wants to do.

## Box 1

### Amartya Sen's theory: Capabilities, freedoms and democracy

The capability approach draws a distinction between resources, capabilities and functions. Resources are all the goods and services made available to an individual (traded and non-traded goods, rights conferred by a society such as the right to work, the right to education, the right to social security, etc.): these are in fact formal rights. Capabilities, or real rights, are people's actual freedom to choose their way of life and use the resources available to them: everything depends on the society and environment in which they live. Functions, lastly, are the way individuals ultimately act: their actual behaviour depends in the last analysis on the existence of real capabilities.

Increasing people's choices means enhancing their capabilities, and this is done by making the best use of resources: health, nutrition, education, etc. Of course, these capabilities can only be put to use if economic circumstances (access to productive resources, credit, jobs, etc.), political conditions (political participation authorized by the regime) and the social environment so permit.

Democracy is at the heart of this system, and its function is not merely to guarantee the right to vote. It must ensure that people's freedom is grounded in political freedom (open participation in debates) and it must also play an instrumental and constructive role. It is in this system that press freedom becomes critically important.

Amartya Sen sees democracy as consisting not just of respect for majority rule but also of protection for people's rights and freedoms, universal access to entitlements, participation in public deliberations, and access to information. The population needs a guarantee of access to resources, encompassing both the rights attaching to them and the conditions of access. The capability approach can be used to evaluate social states in relation to human capabilities rather than utility (happiness, satisfaction of desires) or the power of resources (income, goods, assets).

Because it is multidimensional and multidisciplinary, this approach has been universally adopted and employed in works dealing with human development.

Source: UNDP; «Faut-il lire Amartya Sen ?», *L'Économie politique*, No. 27, July t 2005.

## Human development index

Human development is generally measured by the human development index (HDI), which takes account of four main variables:

- life expectancy at birth;
- adult literacy rate;
- gross primary, secondary and tertiary enrolment;
- real gross domestic product (GDP) per capita, expressed as purchasing power parity (PPP), which acts as a variable representing the resources necessary to guarantee a decent standard of living.

The clues offered by this indicator as to a country's state of development thus go further than those provided by mere consideration of a country's income. However, the scope of the indicator is limited and cannot, irrespective of the context, offer a complete picture of human development. It should be noted that all the available information on human development could be grouped together under a broader heading of "human development accounting".<sup>12</sup> The HDI is only one entry in this accounting and gives only one aspect of the concept. As is maintained by some, if human development is a house, the HDI is the door. One should not mistake the door for the house or stop at the door but should enter the house.<sup>13</sup> By taking account of the more general dimensions of well-being, the HDI extends the concept of development beyond mere consideration of gross national product (GNP) per capita. Governments and individuals can evaluate progress and determine priorities in interventions to be undertaken in order to improve the well-being of the population. Albeit much criticized, this measure thus makes it possible to compare countries' levels of development and to gain an overall idea of human development trends. The other components of the concept of development must nevertheless be explored in greater detail.

## Human poverty

### Concept of human poverty

Since the human development index does not make it possible to identify all aspects of human deprivation, economic growth has to be seen as a means, and not an end, in the service of human well-being. Human poverty is not just monetary; it is also reflected in shortened lifespan, poor health, illiteracy and non-participation in community life. Discussing human poverty thus entails a more detailed consideration of some aspects of the deprivations that cause individuals' level of human development to remain low. Poverty can be defined as chronic deprivation of the resources, capabilities, choices, security and power necessary for the enjoyment of an adequate standard of living and other civil, cultural, economic, political and social rights.<sup>14</sup> The economic aspect of poverty is often put forward as a standard feature of the definition of poverty. However, the cultural, political and social aspects of the phenomenon should never be overlooked. Poverty not only means economic and material deprivation; it is also an affront to human dignity. Drawing attention to the links between development and freedom, Amartya Sen believed that poverty must be seen as the deprivation of basic capabilities and not as lowness of income. That vision is fully consistent with the human-development approach adopted by the United Nations Development Programme (UNDP), which focuses on the process of enlarging people's choices by ensuring an expansion of their capabilities.

### Human poverty indices

For ease of reference, development agencies prefer to use quantitative definitions of poverty. Several indicators exist for evaluating human deprivation. The human poverty index (HPI) is a general indicator of individuals' levels of deprivation in the different HDI dimensions. It thus gives an initial idea of countries' poverty. A distinction has to be made between two HPIs. The HPI-1, which focuses on developing countries, incorporates the percentage of people who will not survive beyond the age of 40 years, the percentage of illiterate adults and a summary measure of decent standards of living (percentage of people having access to safe water and health care and percentage of malnourished children under five years of age). The HPI-2 deals with degrees of deprivation prevalent in industrialized

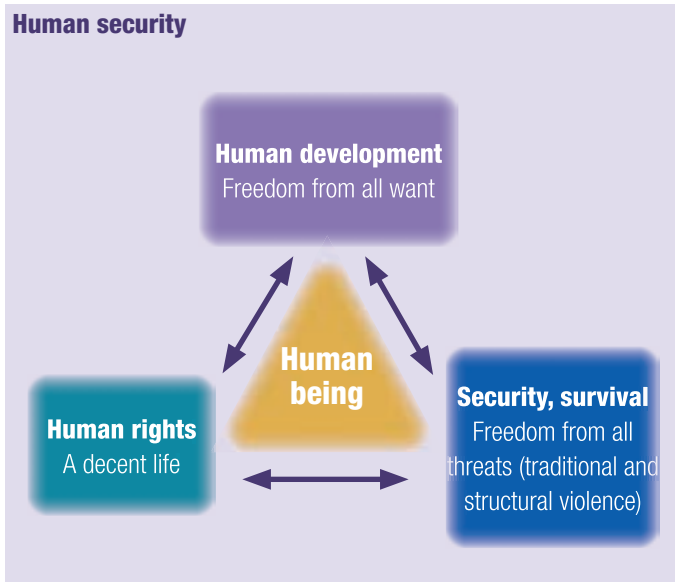
countries. Here the components are the percentage of people not surviving to the age of 60 years, the percentage of persons lacking literacy skills, the percentage of people living below the income poverty line (50% of median income) and the long-term unemployment rate (more than 12 months). For the same reasons as those cited in connection with the HDI, the HPIs cannot by themselves give a good idea of human poverty. That is why other indicators, such as the poverty thresholds of \$1 or \$2 a day, can be useful in this respect, as can the Gini index (which measures inequalities), access to resources (clean water and sanitation), infant mortality and education rates. However, many aspects of poverty that impede the observance of human rights cannot be identified quantitatively.

## Human security

### Concept of human security

This is still a new concept in the literature and several theories have been developed on the subject. The key idea is to focus attention on the security of the citizens of a State rather than on the State itself.<sup>15</sup> In addition to individuals' physical security as such, all factors that can affect their social and, most importantly, human integrity have to be considered. This means being free from threats (wars and conflicts, physical assault, sexual or psychological abuse, violence, persecution or death threats) and from want (decent employment, food and health),<sup>16</sup> and thus living a life with dignity (according to the principles set forth in the Universal Declaration of Human Rights). In 1994, UNDP decided to incorporate this concept in the series of Human Development Reports, breaking it down into seven components: economic security, food security, health security, environmental security, personal security, community security, and political security. This makes it possible to go beyond the weaknesses associated with underdevelopment (poverty, hunger, disease, pollution, etc.) and view insecurity as a form of structural violence.<sup>17</sup>

Figure 1



The UNDP definition emphasizes that individuals should be able to live out their choices freely and safely, with the assurance that what they enjoy today will still hold good tomorrow. That definition has been followed by many others. The general idea is that the different threats to an individual and society are all interrelated.<sup>18</sup> States must realize that their monopoly with regard to the use of violence and the defence of territory has to be coupled with a responsibility to protect their citizens and give them greater decision-making capacity. The State is no more than a means to an end, namely the safety and welfare of its people.<sup>19</sup> The latter must realize that they are responsible for their own security in the broad sense. Education and information contribute to the assumption of such responsibility. Without them, individuals cannot become aware of their social obligations or act collectively. People have to enjoy freedom of expression and press freedom. Freedom of religion and freedom of association must also be respected. Every individual is accordingly also responsible for the system as a whole. The infringement of any of his or her freedoms is an infringement of national security itself. This human-security approach assumes that people's quality of life can be affected by underdevelopment as much as by the violation of their fundamental rights or by "traditional" threats. Since these

different dimensions are interdependent, they must also be considered on equal terms. **Figure 1** gives a simple illustration of the human-security approach.

## How can human security be measured?

**Table 2. Human security, a threshold-based approach**

Threshold 1	Threshold 2A	Threshold 2B	Threshold 4
Vital threats	Vital needs	Extended needs	Dignity
Facing violence	Facing vital difficulties	Making choices and living in dignity	Living in a safe environment
Mortality from violence	Issues of access and distributive justice: water, food security, etc.	Education rate	Levels of corruption, good governance indicators
Mortality from violence	Nutrition levels: daily calorie intake	Social security	Nature of legal rules and judicial security
Statistics on population movements	Health statistics	Unemployment rate	Environmental issues
Rape/violence levels broken down by sex	Access to vital facilities, health problems: water, epidemics	Income distribution, inflation, measures of purchasing power	

Source: S. Tadjbakhsh (2005).

Given the empirical complexity of assessing the concept, there is currently no (institutional) index of human security.<sup>20</sup> Even though a holistic approach to human security is presented here (incorporating all threats to the freedom of the individual), the absence of a human security index (HSI) – which could be used as an HDI – stems from the lack of agreement on the actual definition of the concept. The latter raises the question of what makes a life good before its lack of amenities is measured. However, the problem still lies in evaluating qualitative data. While, for example, governance indicators are available, the information on ways of evaluating the costs of a conflict is still insufficient (extending, in this approach, beyond numbers of fatalities). If a “narrow” definition of human security cannot therefore provide an appropriate indicator, how can human security in the broad sense be identified? As observed by Bajpai, there is a need to adopt both qualitative and quantitative approaches, supplemented by public opinion surveys, in order to gain an idea of the pattern of the threats and to assess the capacity to deal with them.<sup>21</sup> A simple way of measuring degrees of human security or insecurity is thus to apply its seven components as listed by UNDP. A threshold-based approach (very similar

to the concept of the pyramid of needs), as described by S. Tadjbakhsh,<sup>22</sup> is also possible (table 2).

## Human rights

The adoption of a human-rights perspective and definition can provide adequate responses to the many facets of poverty without impairing simple rights in the pursuit of growth and development. Particular attention should be paid to individuals' daily vulnerability and to the assaults on human dignity that accompany poverty. One should thus look not just at resources but also at capabilities and the choices offered to the individual. The absence of one or more of these factors generally prevents individuals and families from living freely. The situation can then deteriorate rapidly and have more serious and permanent consequences. Lack of basic security leads to chronic poverty when it affects several aspects of people's lives, when it is prolonged and when it severely compromises people's chances of regaining their rights and of assuming their responsibilities in the foreseeable future.

### Governance and human rights

The term *gouvernance* was used in Old French during the thirteenth century to signify the art and manner of governing. In the following century it was introduced into Middle English with the same meaning but was little used. In the late 1980s it was revived by the World Bank and subsequently by the other international institutions. The expressions "good governance" and "poor governance" have since been employed, the term being used essentially as an ideological tool to denote minimal State policy.<sup>23</sup> It is, however, a versatile term. Used in both economic and social sciences, it conveys diverse meanings not covered by the word "government". As stated in the White Paper on European Governance, in both corporate and State contexts the term embraces action by executive bodies, assemblies (e.g. national parliaments) and judicial bodies (e.g. national courts and tribunals).<sup>24</sup> The definition adopted here is that given by Daniel Kaufmann, Aart Kraay and Pablo Zoido-Lobato:<sup>25</sup> governance includes (1) the process by which governments are selected, held accountable, monitored and replaced; (2) the capacity of governments to manage resources efficiently and formulate and implement sound policies and



regulations; and (3) the respect of citizens and the State for the institutions that govern economic and social interactions among them. Understood in this sense, governance encompasses the system of government and how it interacts with the people.

## Governance indicators

Given that the research by the World Bank is the most advanced in this field, the governance indicators applied in this study correspond to those developed and used by that organization. These indicators identify and quantify the subjective dimension of governance. Like entrepreneurial risk and difficulty, perception of the institutional environment does not depend solely on objective elements such as the legal framework or tax system in place. Operators also base their judgement and capacity to act on their perception of the degree of corruption among public officials, the protection of private property or the credibility of government policies and announcements.

The six indicators developed by the World Bank show the state of governance in 209 countries over the period from 1996 to 2004.<sup>26</sup> They are constructed on the basis of 352 variables drawn from 37 different databases developed by 31 governmental and non-governmental organizations. The scale adopted is standardized so that their average is centred around 0. The higher the indicator value, the greater will be the quality of governance in the area under examination. The indicators are:

- “voice and accountability”, which measures political, civil and human rights in each country;
- “political instability and violence”, which expresses the likelihood of violent threats to, or changes in, government, including terrorism;
- “government effectiveness”, which indicates the quality of public services and the competence of the bureaucracy;
- “regulatory burden”, which evaluates the incidence of market-unfriendly policies;

- “rule of law”, which examines the quality of contract enforcement, the police and the courts, and the risks of violence and crime;
- “control of corruption”, which assesses the prevalence of both petty and grand corruption.

### **Violence-related insecurity**

Situations that represent a direct threat to the physical integrity of the person – such as wars and armed conflicts, environments where crime rates are high and personal assaults are common – are all regarded as abnormal. It is difficult for human beings to recover their freedom and use their abilities if their freedom of movement is in danger. That dimension is also examined in this study, albeit briefly, since the corresponding indicators are difficult to obtain. Only a few indicators for which the results are the most convincing are thus explored here: military expenditure as a percentage of GDP, military personnel as a percentage of the working population, number of refugees by country of origin and percentage of fatalities in war situations or in connection with criminal violence.

## **Approach framework adopted**

### **Conceptual framework**

As shown in the preceding subsections, the notion of development encompasses a wide range of concepts from economic growth to the concept of human freedom. A broad-based approach has been adopted in this study in order to bring together different dimensions of development and analyse them clearly. Figure 1 illustrates the central position given to individuals, who are both agents of development and judges of their development. The idea is thus to split all the dimensions into three groups:

- “development” proper (poverty, health and education);
- human rights and governance;
- conflict situations and threats to security.

Threats to individuals are all interlinked and freedom of the press can, by affecting any one of them, contribute to improving them all. It is also important to

note that the analysis examines first and foremost what individuals want and aspire to (their needs) before looking at what the system can provide them with (a life of dignity). Conflict situations are briefly dealt with as relating to abnormal situations (threats).

The approach used in this study is thus based on the principle underlying the theory of human security outlined above. However, since no appropriate indicators can be found to apply this conceptual framework adequately to the analysis presented here (box 2), this study simply adopts a substitute: the concept of the pyramid of needs and the way in which constraints on the life of the individual are connected. The theory of human security, related to the concepts of human development and the Millennium Development Goals (MDGs), is therefore only useful in this connection to identify the real challenges of development and how all the dimensions of development in the broad sense are interlinked.

Rather than adopt a purely individual approach, this study has thus combined the institutional and individual dimensions of development with sectoral approaches.

## Box 2

### The dilemma of the human security approach

A human security approach could not be applied because the indicators and figures needed to implement it in practice were lacking: it is difficult to estimate and measure the way individuals understand their relationship to the system they depend on. Even had individual data been available for analysing threats and freedoms that accurately reflected individuals' needs and aspirations, the empirical analysis would have been severely constrained by lack of data. Three points should be emphasized:

- the human security concept seeks to capture a personal, subjective experience. The idea is to understand the perception individuals have of their own (in)security, and this requires special surveys and substantial work to place them in context. Data of this kind are also very hard to aggregate. This, however, does not detract from the need to have field studies on people's perception of their security and its links with press freedom;
- the need to combine qualitative indicators (people's perception of security in a broad sense) with quantitative ones (how society or the system achieves its development goals or objectives) is also problematic. An entire research project is really needed to find out how these two types of data, and the systemic and individual dimensions, can be combined. Correlations could then be established between this optimal data set (in terms of the human security approach) and press freedom;

- lastly, human security is not concerned with indicators of human development, human rights and security as such (the points of the triangle in figure 1), but rather with the interactions between these indicators (the sides between the three points of the triangle). As is explained a little further on, this study is concerned with the correlations between press freedom and development. A big contribution to the theory of human security would be to examine the causal links between the indicators chosen to evaluate it and the level of press freedom.

## Empirical approach

Empirically, human development is assessed by means of several indicators, whose composition is described above. In addition, the MDGs defined by the United Nations in 2000 target eight aspects of human development:

- eradicating poverty and hunger;
- achieving universal primary education;
- promoting gender equality and empowering women;
- reducing infant mortality;
- improving maternal health;
- combating HIV, malaria and other diseases;
- ensuring environmental sustainability;
- developing a global partnership for development.

To monitor the attainment of these goals, the United Nations has prepared 18 targets and 48 indicators.

Eradicating poverty is one of these goals in the narrow sense and all the other dimensions draw on aspects referred to in order to explain development as a whole. **Table 3** compares and summarizes (for information purposes and without establishing any logical links) the MDGs and the different aspects of human security defined by UNDP.

As explained above, the indicators used to measure human development differ from those that can help assess the degree of human security of a country's population. However, by considering the indicators employed in the Human Development Reports and measurements partly similar to the concept of human security, it has been possible to select the most appropriate available indicators for the study and for the development approach adopted. Those indicators

have been classified according to five major dimensions (table 4). The first three dimensions correspond to the different needs of the human being. They make it possible to assess monetary poverty and the other aspects of human deprivation. The fourth aspect corresponds to the system under which the people of a given country develop. The freedoms guaranteed by the government as a whole can be assessed on the basis of the governance of that system. The last dimension relates to situations of conflict and violence. Such situations, as stated above, are abnormal and hamper human development as a whole. The indicators come from different statistical sources (World Bank, UNESCO Institute for Statistics, Transparency International and SIPRI, among others), which will be referred to in the course of the analysis.

**Table 3. Millennium Development Goals and human security (UNDP)**

The 8 Millennium Development Goals (MDGs)		The 7 dimensions of human security (HS)	
MDG 1	Eradicate extreme poverty and hunger	HS 1	Economic security (minimum income, job security, absence of financial crisis or economic depression)
MDG 2	Achieve universal primary education	HS 2	Food security (resources and access to resources)
MDG 3	Promote gender equality and empower women	HS 3	Health security (poverty-related deaths and diseases, unhealthy environment, pandemics and infections, access to medical treatment)
MDG 4	Reduce child mortality	HS 4	Environmental security (damage to ecosystems, drinking water access)
MDG 5	Improve maternal health	HS 5	Personal security (State violence, ethnic tensions, security of women and children/violence and exploitation)
MDG 6	Combat HIV/AIDS, malaria and other diseases	HS 6	Community security (abuse of certain members of society)
MDG 7	Ensure environmental sustainability	HS 7	Political security (torture, repression, ill-treatment and disappearances)
MDG 8	Develop a global partnership for development		

Table 4. Indicators used and development dimensions evaluated

Indicators used in this study	Dimensions	MDGs and related human security (HS) aspects
HDI HPI-1 and HPI-2 Per capita GDP in PPP Population living on less than \$1 or \$2 a day Poverty gap index People suffering from undernutrition Population with access to an installed water point	Poverty and decent living conditions	MDG 1 and 7 HS 1, 2 and 3
Life expectancy at birth Infant mortality rate One-year-olds fully immunized against measles and tuberculosis	Health	MDG 4 HS 3
Proportion of births attended by skilled health personnel		MDG 5 HS 3 and 5
Proportion of population aged 15-49 who are HIV-positive Number of doctors per 1,000 people Public health spending Private health spending		MDG 6 HS 3
Education index (literacy and school enrolment) Adult literacy rate (aged 15 and over) Primary and secondary enrolment ratios Education expenditure	Education	MDG 2 HS 1
Voice and accountability Political stability and absence of violence Government effectiveness Regulatory quality Rule of law Control of corruption	Gouvernance	MDG 8 HS 5, 6 and 7
Military expenditure as % of GDP Military personnel as % of total workforce Arms imports and exports Refugees by country of origin Mortality due to warfare, violence, suicide, road accidents	Security and violence	MDG 8 HS 5 and 6

## Methodology

### Hypotheses

The correlation between press freedom and human development has never been scientifically tested. Some studies have discussed the links between development or governance indicators and press freedom<sup>23</sup> but none has been able to draw general conclusions, i.e. on an overall level, in terms of a system of logical connections that would give a precise idea of the links between governance, economic development, human security and freedom of the press. Whether involving the interactions between corruption, education and press freedom (Ahrend, 2002), the links between a country's development and press freedom (Alberro, 2005), the importance of press freedom in government campaigns against HIV (Bor, 2005), the influence of globalization and economic liberalization on household media consumption (Yang and Shanahan, 2003) or, more generally, the role of the media in economic development (Coyner and Leeson, 2004), the findings are all unanimous and bear out the assertion of our two great thinkers Kant and Sen that human, economic and social development is promoted through a free press.

On the basis of these observations and conclusions, several hypotheses have been put forward in formulating this study, the main one being that freedom of the press has a positive impact on all dimensions of human development. By affecting freedom of expression, press freedom helps remove some of the constraints on the other freedoms that an individual should normally enjoy. But can the different dimensions be arranged in sequence? In other words, are we faced with a chicken-and-egg dilemma or can any chronological or hierarchical order be established? How can freedom of the press promote the other human freedoms? Are the correlations observed between press freedom and the different indicators themselves affected by the thresholds of human security? These are the questions to which this study will attempt to find answers or for which avenues of discussion are suggested.

## Indicators

The indicators used in the article were obtained for the five years available and used by the World Bank in its statistics on governance (1996, 1998, 2000, 2002 and 2004). The difficulty in gathering the remaining data varied according to the specific indicator and year concerned (data on violence and security being the hardest to obtain). It was ultimately decided, in line with the purpose of this study and the methodology used, to work out averages for each indicator analysed. The correlations established between freedom of the press and each development dimension are thus not tested over one year or determined over a long period (more than 10 years). They nevertheless enable an opinion to be formed on the matter from calculations worked out over an average time span. The correlations calculated are therefore not valid annually but provide a medium-term picture of links between press freedom and development. Such a period is neither too long to risk obscuring certain facts nor too short to risk giving a distorted view of the situation in some countries at a given point in time. Development is a process whose trends are assessed over several years and, by optimizing and collating available data, such an approach gives a “stable” picture of valid situations in countries during the last 10 years. This choice also makes it possible to extend the field of observation and the number of countries covered by the study.

The methods used to study these correlations are described in box 3. While the econometric approach adopted is straightforward, its nuances need to be identified. That essentially involves determining the linear correlations between press freedom and some development indicators. The figures obtained are not an expression of causality between the two variables. They give an idea of the links between them, the strength of their linear interrelationship and the effect which one of the variables has on variations in the other variable, all other things being equal. When the correlation is significant between two variables, this means that change in one of the variables (A) brings about change in the other variable (B). A can cause B just as B can cause A but a third factor, C, can also cause both A and B, which are not themselves linked. Also, if several variables were taken into account in the regression, the coefficients obtained would not be the same.

The main findings confirm the existence of a “good” correlation between freedom of the press and the different dimensions of development, poverty and



governance (i.e. the relationship between the variables is significant but the correlation coefficients are low). Press freedom is positively correlated with all the dimensions of human development, economic security, food security and health security. No country concurrently has a free press and a high percentage of its population living below the poverty line. With regard to links between freedom of the press and education, an interesting observation emerges and confirms the presence of thresholds in a country's development. A number of preconditions appear to be required from a development perspective before education targets can be met. A population that has not moved beyond the basic levels of human development cannot generally experience high educational achievement or thus a really high degree of press freedom. By contrast, once the education prerequisites have been met, freedom of the press can genuinely develop. It can thus be readily appreciated that all the other dimensions of development will in turn benefit as a result and that a positive dynamic can be established. It is then shown that freedom of the press and good governance are significantly and positively correlated. Press freedom and governance are not mutually exclusive. They support each other while promoting a country's economic and human development. Good governance needs a free press in order to be effective as much as it first needs development of education in order to genuinely exist and be termed good governance. Owing to a lack of facts and figures on the issues of "physical" insecurity, it has not been possible to prove the existence of strong correlations between freedom of the press and different aspects of personal security and violence. However, some positive links are certainly present and remain to be further confirmed.

In adopting a human-centred approach, the first part of this study examines the correlations between freedom of the press and the fairly broad dimensions of human poverty through the spectrums of monetary poverty, decent standards of living, health and education. This entails exploring how press freedom can ease the pressure of the constraints on individuals' ability to meet their needs. The next part analyses the links between governance and press freedom. The system as a whole and how it allows people to develop are assessed according to the press freedom that the system affords the population within it. The last part examines the links between freedom of the press and indicators of personal insecurity and violence, and is followed by conclusions, discussion and recommendations.<sup>28</sup>

## BOX 3

**Methodological note**

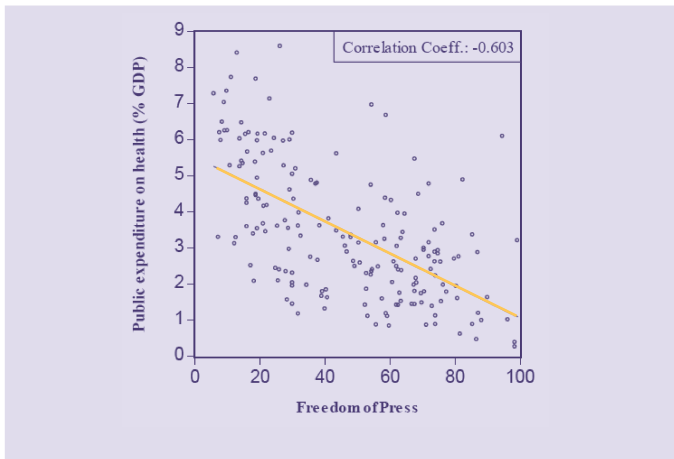
Evaluation of the linear correlation between press freedom and indicators of development, governance and security is conducted in two stages:

- calculation and analysis of the correlation coefficient;
- use of the ordinary least squares method to estimate the coefficients of the regression line.

The correlation coefficient measures the linear dependence between two variables. In other words, it is an indicator that measures the strength of the linear relationship between the variables. Its value can range from minus 1 to plus 1. It also depends on the size of the observation; different-sized samples of a single group of variables may produce different correlation coefficients. When the correlation coefficient is 0, it is said that there is no correlation or that the two variables are independent. When it has an absolute value of 1, the two variables are said to be perfectly dependent or correlated. In practice, neither situation is likely to arise.

Figure 2 shows the spread of points obtained after crossing the variables “Freedom of press” and “Public expenditure on health”. The correlation coefficient is minus 0.603. The negative sign indicates that an increase (decrease) in “Freedom of press” entails a decrease (increase) in “Public expenditure on health” and vice versa. The range of the “Freedom of press” indicator is 0 to 100, with the countries that have the freest media scoring close to 0; the higher the score, the less freedom the press has (and the lower health spending is, in this case).

**Figure 2.**



Another measure of the strength of the relationship between two variables is the coefficient of determination ( $R^2$ ). This too is an indicator of the quality of the regression between the variables.  $R^2$  is the square of the correlation coefficient, and thus has a range of 0 to 1. In table 5 it is 0.362, which means that 36% of the variation in "Public expenditure on health" is accounted for by "Freedom of press".

The line in figure 2 is the linear regression line between the two variables. It has an equation with the form  $y = Ax + K$  where  $x$  and  $y$  represent, for example, "Freedom of press" and "Public expenditure on health", respectively.

**Table 5.**

(Independent variable)	Equation (dependent variable) Public expenditure on health
Freedom of press	$- 0,045$ (A) $0,004$ (B) $- 10,142$ (C) $(0,000)$ (D)
$R^2$	0,362

The A coefficient estimated is given in table 5. It indicates that a variation of one unit in  $x$  entails a variation of A units in  $y$ . More precisely, an increase of one unit in "Freedom of press" leads to a decrease of 0.045 units in "Public expenditure on health". It needs to be stressed that when a logarithmic transformation is carried out on one of the variables, the variation in the transformed variable is interpreted in percentage terms and not unit terms.

Coefficients B, C and D in table 5 give an idea of the quality of the A coefficient. The B coefficient represents the standard deviation, which measures the deviation from the observed average (here the estimated A coefficient). C, the Student t statistic, is the ratio between the estimated A coefficient and standard deviation B. As to D, this is the probability of coefficient A being 0. When probability D is close to 0 or the Student statistic (C) is higher than 2 in absolute terms, then the hypothesis tested (the opposite hypothesis to the one actually proposed, i.e. the hypothesis that the variables are not correlated, that the correlation coefficient is zero) can be rejected (the rejection thresholds here are generally 10%): the variables are correlated according to statistically significant criteria. The calculations were carried out using E-Views software.

5. On 10 December 1948, the 58 Member States which then comprised the General Assembly adopted the Universal Declaration of Human Rights (resolution 217 A (III)), at the Palais de Chaillot, Paris. To commemorate its adoption, International Human Rights Day is celebrated each year on 10 December.
6. See the Declaration of Windhoek, UNESCO, 1991.
7. See the Belgrade Declaration, UNESCO, 2004, [http://portal.unesco.org/ci/en/ev.php-URL\\_ID=15654&URL\\_DO=DO\\_TOPIC&URL\\_SECTION=201.html](http://portal.unesco.org/ci/en/ev.php-URL_ID=15654&URL_DO=DO_TOPIC&URL_SECTION=201.html), and the Dakar Declaration, UNESCO, 2005, [http://portal.unesco.org/ci/fr/ev.php-URL\\_ID=18966&URL\\_DO=DO\\_TOPIC&URL\\_SECTION=201.html](http://portal.unesco.org/ci/fr/ev.php-URL_ID=18966&URL_DO=DO_TOPIC&URL_SECTION=201.html).
8. For more information on the Freedom House methodology, see: <http://www.freedomhouse.org/template.cfm?page=56&year=2005>.
9. For more information on the RWB methodology, see: [http://www.rsf.org/article.php3?id\\_article=15322](http://www.rsf.org/article.php3?id_article=15322).
10. See *Global Human Development Report 2004*, p. 127.
11. See *Arab Human Development Report 2002*, p. 18.
12. *Ibid.*, p. 20.
13. Selim Jahan, quoted by S. Tadjbakhsh (2005a), p. 9.
14. United Nations Committee on Economic, Social and Cultural Rights, [http://www.unhcr.ch/tbs/doc.nsf/\(Symbol\)/E.C.12.2001.10.En?](http://www.unhcr.ch/tbs/doc.nsf/(Symbol)/E.C.12.2001.10.En?)
15. S. Tadjbakhsh (2005a): "Concern with the security of state borders should give way to concern with the security of the people who live within those borders."
16. *Ibid.*
17. *Ibid.*, p. 13.
18. As explained in the report of Kofi Annan (2005), poverty and the denial of human rights are strictly speaking not the cause of civil war, terrorism or organized crime but can greatly affect the risk of instability and violence. Similarly, countries which are well governed and respect human rights are best placed to avoid conflicts and overcome or alleviate development problems.
19. *Ibid.*, p. 25.
20. Of the existing approaches, specific mention may be made of those of King and Murray, Booyen, Bajpai or Gustavson and Carter.
21. K. Bajpai (2002).
22. S. Tadjbakhsh (2005b), p. 31.
23. M.-C. Smouts (1998). See also B. Cassen (2001).
24. [www.eu.int/comm/governance/index\\_fr.htm](http://www.eu.int/comm/governance/index_fr.htm).
25. See their papers on this topic and, in this connection, the definition given in D. Kaufmann, A. Kraay and M. Mastruzzi (2000) and also these authors' papers of 2005.
26. *Ibid.*
27. See primarily the study by P. Norris (2001): "The study confirms that media systems characterised by widespread mass access and by an independent press are most closely associated with systematic indicators of good governance and human development. In particular, nations with these types of media system experience less corruption, greater administrative efficiency, higher political stability, and more effective rule of law, as well as better development outcomes such as higher per capita income, greater literacy, less economic inequality, lower infant mortality rates, and greater public spending on health."
28. The indicators examined in connection with press freedom are stated at the beginning of each section. The results of the regressions carried out using the ordinary least squares method are set out at the end of each part. A code is used: Student's t-statistic and standard deviation in bold: significant results; in bold italic: non-significant results; R2 in italic: very low coefficient. The country name codes are given in the annexes.

# Freedom of the press, development and poverty

## Freedom of the press, development and poverty

**T**his chapter is concerned with the links between freedom of the press and different human development indicators. It explores how a good press can help guarantee good economic, food and health security. The effects of press freedom on education are also assessed. The starting premise is that freedom of the press is closely associated with a high level of human development. This chapter attempts to verify this statement empirically and to look at the significance of the role played by the press in conditions of human deprivation.

In 2001, Pippa Norris published a study on this topic. While confirming the importance of press freedom for governance and human development, her work was limited to the study of eight indicators of human development (HDI, GDP per capita, Gini index, child mortality, public expenditure on health, life expectancy, adult literacy rate, and population receiving secondary education). The aim here is to undertake a broader study on the dimensions of poverty and development outlined in the introduction.

Three dimensions of human development will be covered in this chapter:

- poverty in the most standard meaning of the term (acceptable living conditions);
- health;
- education.

These three dimensions combined within the HDI make it possible to consider the economic aspects of the concept of development, but also other equally important dimensions.

## Preamble: press freedom, HDI and HPI

### Facts

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As stated in the introduction, the HDI provides an overall measurement of countries' levels of development. This composite indicator combines quantitative and qualitative data: life expectancy at birth (health component), average enrolment and literacy rates (education component) and real GDP per capita (economic component). It ranges from 0 to 1, with 1 representing the highest development level.

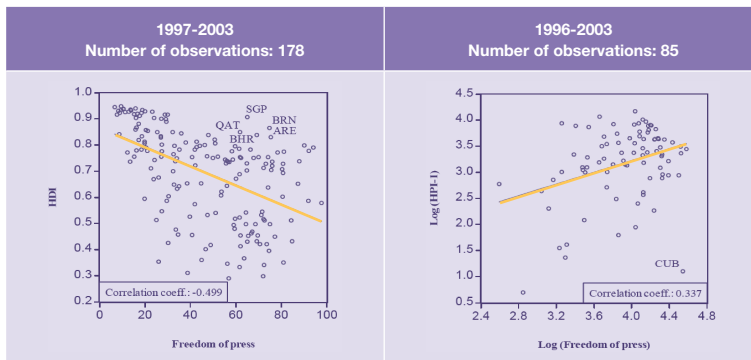
The methodology for constructing the HPI is similar to that used for the HDI. However, unlike the latter, the HPI reflects not societies' state of development but the degree of human deprivation. The greater the value of this index, which ranges from 0 to 100, the higher the poverty level will be within the country. The HPI thus gives an even clearer picture of the deprivations suffered by a country's population. The HPI-1 is applied to developing countries and the HPI-2 to industrialized countries. For comparability purposes and because the sample is wider, only the HPI-1 is used in this study.

Taking the average HDI and HPI figures for 1997-2003 and 1996-2003 respectively, samples from 178 and 85 countries were used for each of the indicators. The regressions were thus carried out on these country samples (noting that the sample used for the HPI-1 is structurally reduced by the non-inclusion of developed countries). It is important to emphasize that the construction of the HDI varies from year to year as a result of methodological changes or quite simply because of the lack of data. The values are therefore not comparable over time.

This does not, however, invalidate the method of aggregating data available during a period into an average. It is not trends over time that are being explored here but countries' relative ranking and the effect of press freedom on that ranking.

**Figure 3** shows the correlation between press freedom and the composite indices of human development and human poverty.

**Figure 3. HDI and HPI and press freedom**



## Interpretation

These initial regressions already give an idea of the links between press freedom, human development and poverty. The results are significant but the low  $R^2$  level suggests that constraints on the press have only relatively little effect on the two indices considered.

Countries with a high development level (HDI above 0.8) are generally characterized by a relatively free press (index below 50). The same is true of poverty, although the countries are not equally distributed over the right-hand graph (**figure 3**). The concentration is greater in the upper right quarter, where countries with low levels of press freedom and a high overall poverty indicator are situated.

The exceptions are the Gulf States and Cuba. In the case of the former, the HDI is high but the press is not free. In the case of Cuba, however, the overall poverty index is very low whereas the press is not free. While the specific situation

of the Gulf States can readily be explained by their status as oil exporters (GDP per capita greatly affects the HDI), the case of Cuba is more interesting (**box 4**).

## Box 4

### Study of a persistent outlier, Cuba

Cuba very often features among the “outliers”, the countries on the fringes of the regressions, as it combines good indicators of human development with a non-free press (the index score is 95.2).

The Cuban regime ranks among the world's most repressive. The media are under the monopoly control of the State, ensuring, in the words of article 53 of the Constitution, “that they will be employed in the exclusive service of working people and the interests of society”. Journalists who try to work outside the State framework are harassed, persecuted and imprisoned. The international press is also monitored, even though it is not available to the local population. At the same time, Cuba's HDI is quite high (0.791) and its HPI very low (3). The country would thus seem to have managed to combine a repressive political regime with an acceptable level of development. Its peculiar status is very apparent in figure 3.

Unlike Singapore, which is discussed below, Cuba can hardly be described as an exception where governance is concerned, as its indicators for this are very mediocre. Per capita GDP is only US \$5,259 (in PPP for 2002), making it the poorest of the countries that score well on the HDI. Data for the proportion of the population living below the poverty line are not available, but it is easy to guess that this indicator must be quite high.

Thus, Cuba's good HPI score is explained entirely by the deliberate policy followed by the Cuban regime in education and health. Much of the investment concerned was financed with Soviet support. Since the fall of the Communist bloc, the country has gone through difficult economic times and it has to be asked whether the development of tourism will enable the Cuban regime to carry on investing enough in education and health, sustain the country's level of development and combat poverty effectively.

The Cuban paradox can thus be accounted for by the peculiar circumstances of the Cold War, and there must be a large question mark over the sustainability of this form of development.

\* *The worst of the worst: the world's most repressive societies 2005*, report by Freedom House.

### Points to remember

The weaker the constraints on the press, the more developed the country will be. Similarly, the more heavily the press is gagged, the poorer the country will be. The two indices are not greatly determined by freedom of the press but the correlations are highly significant. The media would thus a priori appear to play a role in a country's development.



The particular nature of the countries that do not follow the pattern merely confirms the specific characteristics of the links between press freedom, human development and poverty. This is therefore the time to see whether freedom of the press affects all the dimensions of poverty and development in the same way (table 6).

**Table 6. Estimation of coefficients by the ordinary least squares method: press freedom-HDI/press freedom-HPI**

	Equation 1: IDH	Equation 2: IPH
Press freedom	- 0,004 (0,000)	0,561 (0,002)
Standard deviation	0,000 5	0,172
Student t statistic	<b>- 7,630</b>	<b>3,258</b>
R <sup>2</sup>	0,249	0,113

Significant results are in bold.

## Freedom of the press and decent standards of living

While decent standards of living cannot be defined solely in terms of income, the link between these two aspects is indisputable. The monetary aspect thus serves as a starting point for this analysis of conditions of human deprivation. Several standard indicators will be used, such as GDP per capita in PPP in constant 2002 international dollars, the percentage of the population living below a certain poverty line (1 and 2 PPP dollars a day) and the poverty gap indicators for both thresholds. These data are taken from the World Development Indicators database of the World Bank, providing a sample of 164 countries for GDP and 71 for the poverty thresholds.

Income inequalities should not be overlooked in this analysis. They play a crucial role in people's perception of their living standards. The tool generally regarded as the most effective in measuring inequalities is the Gini index, which is taken from the World Income Inequality Database (United Nations University, World Institute for Development Economics Research). Because of differences in the methods of investigation and construction used for this indicator, the database sometimes contains several data sets for the same country and the same year. Since there was no possibility of opting for one source rather than another, it was decided to calculate the average values obtained for a country each year (if several sources were available), which enabled a sample of 96 countries to be arrived at. The available years for this indicator are 1996, 1998, 2000 and 2002.

The effect of poverty on the population was explored in this analysis by means of two indicators: the percentage of people with access to an improved water source and the percentage of people suffering from malnutrition. These data are taken from the World Bank statistical database but, for the period under examination, only the data for 2002 are available. The sample thus formed contains 158 countries for the water access indicator and 121 for the malnutrition indicator (table 7).

**Table 7. Development indicators used in the correlations**

	Variable	Source
Human development	Human development index (HDI)	Human Development Report
Human poverty	Human poverty index 1 (HPI-1)	Human Development Report
Monetary poverty	Per capita GDP, PPP in 2002 international dollars	World Bank
	Percentage of the population below the 1 \$/d poverty line (PPP)	World Bank
	Percentage of the population below the 2 \$/d poverty line (PPP)	World Bank
	1 \$/d poverty line (PPP)	World Bank
	2 \$/d poverty line (PPP)	World Bank
Inequalities	Gini index	UNU/WIDER
Impact of poverty	Drinking water point (% of population with access)	World Bank
	Prevalence of undernutrition (% of population)	World Bank

## Press freedom and monetary poverty

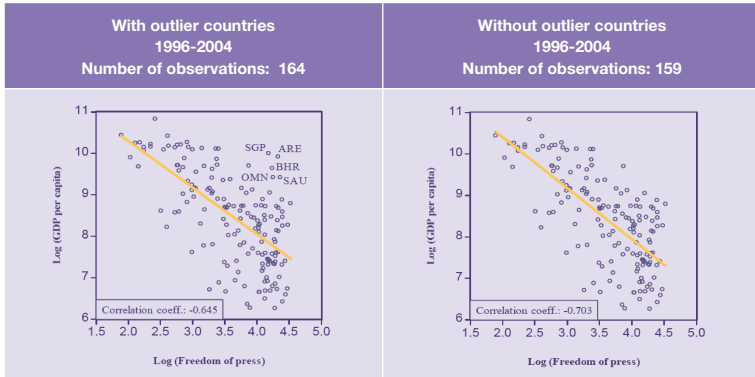
### Freedom of the press and GDP per capita

#### Facts

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The first indicator considered in this part is GDP per capita in PPP terms. The initial assumption here is that a high level of press freedom would go hand in hand with high GDP per capita, possibly with the exception of a few countries such as the Gulf States ([figure 4](#)).

Figure 4. Press freedom and per capita GDP



## Interpretation

Freedom of the press is positively correlated with GDP. There are only a very few countries where the press is not free (press freedom index above 60, i.e. logarithm greater than 4.1) and where GDP per capita is relatively high (above \$10,000, i.e. logarithm greater than 9.2). The countries concurrently having very high GDP per capita and a high degree of press freedom are Australia, Belgium, Switzerland, Denmark, Iceland, Luxembourg, the Netherlands, Norway and the United States. It is also important to note that no countries are situated in the lower left quarter of the graph. No country therefore has both a free press and low GDP per capita.

The five outlier countries (figure 4) are again the four Gulf States and Singapore. It would be interesting to see the ranking of Cuba in this graph but the World Bank has no data on its GDP. The Human Development Report for 2002 gives a figure of \$5,259 per capita in PPP;<sup>30</sup> making that country the poorest of the highly ranked countries in HDI terms.

If the above five outliers are removed from the sample, the correlation obtained is really high (correlation coefficient equal to  $-0.703$ ). A very marked connection thus exists between press freedom and GDP per capita. In purely statistical terms,  $R^2$  is 0.49 for the reduced sample, which means that, all other things being equal, freedom of the press and GDP maintain a strong link.

## Points to remember

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The regression between GDP per capita in PPP and freedom of the press is highly significant. The correlation between the two indicators shows that a high degree of press freedom is definitely associated with high per capita income. However, the few exceptions noted are also a reminder that income does not suffice to guarantee individuals the freedom to think and express themselves and they may thus suffer from other constraints on other freedoms.

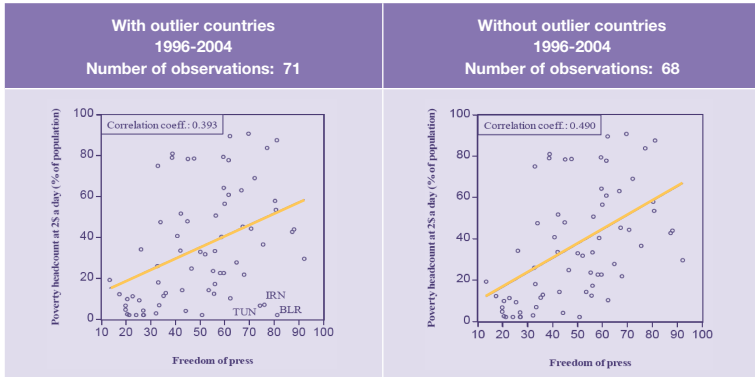
## Press freedom, poverty thresholds and poverty gaps

### Facts

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As there is no automatic link between GDP per capita and individuals' income levels, it is important now to look at the case of people living below the poverty line. Since national standards for estimating poverty vary considerably, this study uses the poverty thresholds of \$1 and \$2 a day. The \$1 threshold is a key datum insofar as it involves the MDG indicator. However, it should not be forgotten that this threshold is used to assess situations of extreme poverty. It would thus be simplistic to consider only that indicator. It cannot alone reflect the fact that living conditions are decent. The political sensitivity of this threshold can also affect the reliability of the statistics. For that reason, the \$2-a-day threshold has also been incorporated in the study. The hypothesis tested here is that a free press cannot exist alongside situations of extreme poverty ([figure 5](#)).

**Figure 5. Monetary poverty and press freedom**



## Interpretation

The initial assumption with regard to the poverty line of \$1 a day is confirmed by the regressions. The results are not highly significant and the correlation coefficient with respect to freedom of the press is only 0.215 for that threshold. The graph of this regression has therefore not been reproduced here. By contrast, as shown in **figure 5**, when people living on less than \$2 a day are taken into account, the results obtained are far more significant and the correlation coefficient is greater, being equal to 0.393. It is thus interesting to note:

- that no country concurrently has a free press (index below 30) and a very high percentage of people living below the poverty line (above 40%);
- that the only three countries with a non-free press (index above 60) and a low level of poverty (less than 10%) are Belarus, Iran and Tunisia. When these countries are removed from the sample, the correlation coefficient increases and its value is then close to 0.5.

This observation is borne out by an examination of the correlation between press freedom and the poverty gap, which could be said to measure the incidence of poverty over society as a whole. This is the average distance separating people from the poverty line, value 0 being allocated to all persons above the threshold.

Although the correlation is not very great (its coefficient is 0.292), the trend is the same. There are no countries with a free press and a significant poverty gap. Also, the outliers – which have a press freedom index above 60% and a poverty gap below 5 – are the same (Belarus, Iran and Tunisia) plus Turkey.

### Points to remember

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A low level of press freedom is strongly associated with a high percentage of people living below the poverty line. This link is best verified with the \$2-a-day threshold and poverty gap but it should also be emphasized that the determination coefficients ( $R^2$ ) are small each time. This means that press freedom cannot by itself explain much of poverty. Its effect may be important in reducing the poor proportion of the population but it cannot alone influence individuals' monetary poverty. As shown by these results and by those obtained with GDP per capita, press freedom generally appears to have an impact not only on a country's economic performance but also on how economic performance affects its inhabitants..

## Press freedom and inequalities

### Facts

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The extent of the inequalities in a country plays an important role in people's perception of their standard of living. Plato observed that: "There should exist among the citizens neither extreme poverty nor again excessive wealth, for both are productive of great evil."<sup>31</sup> Inequalities among people offend a common sense of fairness and it is important to explore the point at which society can be disturbed by them. This also explains why the poverty index for industrialized countries contains an indicator of exclusion. Inequalities may not be the main challenge for the developing countries but it is nonetheless very interesting to explore their link with press freedom.

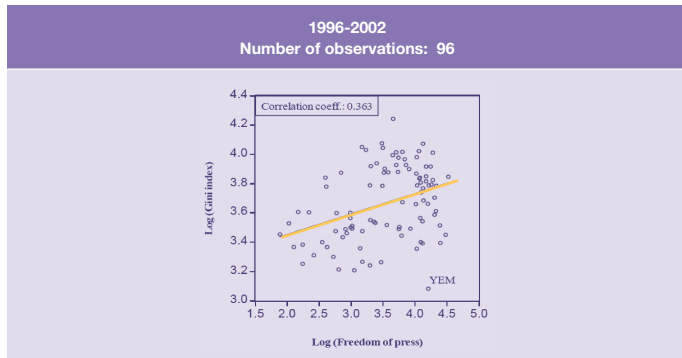
To measure inequalities, use is often made of the Gini coefficient, which is defined by a measurable quantity such as household disposable income. It ranges from 0 to 100, where 0 means perfect equality (everyone has the same income)

and 100 means perfect inequality (one person has all the income and everyone else has none).

## Interpretation

The regression results are significant and, as shown in **figure 6**, there is a positive correlation (correlation coefficient equal to 0.363) between the press freedom index and the Gini index. Apart from Yemen, no country concurrently has many inequalities and a free press or, conversely, a non-free press and few inequalities. The countries where the press is free and inequalities are few (bottom left quarter) are Austria, Belgium, Switzerland, the Czech Republic, Germany, Finland, France, Hungary, Luxembourg, the Netherlands, Slovenia and Sweden. Those where press freedom is low and inequalities are the highest are Cameroon, the Gambia, Nigeria and Zambia (upper right quarter).

**Figure 6. Inequality and press freedom**



## Points to remember

This regression shows that a high level of press freedom is associated with a low level of inequalities. However, even though the results here are significant, it should not be forgotten that the data used for the Gini index are not fundamentally uniform (averages of several indicators over one year and then the average of those indicator averages over all the years considered). The specific situation of Yemen has to be verified before any conclusions are drawn (lack of data?). Nevertheless, the



hypothesis put forward at the start of this regression is not invalidated by the figures, which demonstrates once again how a free press can make use of the inequalities suffered by a population precisely by showing up those inequalities. The more those inequalities are exposed, the more the people will become aware of them and be able to proclaim their rights and demand access to greater freedoms.

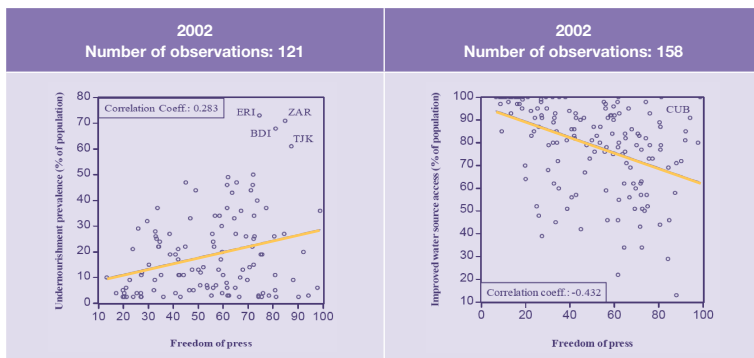
## Press freedom and primary needs

### Facts

The two indicators now compared with the press freedom indicator are those included in the HPI used above, namely malnutrition and access to safe water. In addition to monetary poverty, they make it possible to take account of two realities of the daily lives of persons living in poor and precarious circumstances.

The hypothesis tested in these two regressions is the same. Press freedom is presumed to have a lowering effect on individuals' deprivation levels and hence enable them to access resources more easily. A high malnutrition percentage in a country relates to a problem of access to basic commodities. People cannot obtain such commodities owing to a lack of monetary resources or to failings in their production and distribution processes. The same is true of access to safe water (figure 7).

Figure 7. Impact of poverty and press freedom



## Interpretation

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The regression between malnutrition and press freedom is significant but the correlation is not very high. The four countries with the highest malnutrition rates clearly have a non-free press (Eritrea, Tajikistan, Democratic Republic of the Congo and Burundi). Also, no countries are situated in the upper left quarter, which means that no country concurrently has a free press and a situation of severe malnutrition. The regression determination coefficient is very small (0.08). Malnutrition cannot for the most part be explained by constraints on the press.

The same observation may be made in the case of access to safe water. The regression is significant but the correlation is slightly greater. No country simultaneously has a free press (index below 30) and a very low percentage of people (less than 35%) with no access to safe water.

## Points to remember

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These two regressions are consistent with Amartya Sen's observation that there has never been a famine in a democratic society.<sup>32</sup> A free press enables shortages to be exposed and individuals can then attempt to resolve the cause of the problem themselves. This would appear to confirm the role played by press freedom as a buffer against extreme poverty and malnutrition. It is interesting to note that some countries, such as Cuba, Belarus, Egypt, Iran, Lebanon, Syria, Libya, Turkey, Tunisia, Malaysia and the Gulf States, have access to safe water (over 90) and/or a low malnutrition rate (below 5) but a hounded press (indicator above 60). The press can thus help increase access to particular resources but it cannot be assumed that the press is genuinely free when access to such resources is guaranteed.

## Summary of links between press freedom and decent living conditions

All these initial regressions show that there is a strong link between freedom of the press, GDP per capita and levels of human deprivation in terms of both monetary resources and factors that determine living conditions. The press therefore appears to play a dual role. From a governmental perspective, it constitutes a source

of information about the population's needs but, by arousing public opinion, it also forces governments to intervene, especially in the case of crises or serious societal problems. It should also be emphasized that a free press can improve the situation of individuals in precarious living conditions but that the relationship does not necessarily operate in the reverse direction. In some countries, in particular the Gulf States, people have access to basic resources but the work of the press continues to be impeded. Table 8 shows the main figures obtained in the regressions.

Individuals' material deprivations cannot, however, reflect their quality of life or the extent of their choices. Other resources, mainly in the areas of health and education, need to be explored in order to advance the analysis.

**Tableau 8. Estimation of coefficients by the ordinary least squares method**

	Equation 1 GDP/cap. (logarithm)	Equation 2 Population below poverty line (1\$)	Equation 3 Population below poverty line (2\$)	Equation 4 Poverty line (2\$)	Equation 5 Gini index (logarithm)	Equation 6 Undernutrition	Equation 7 Access to water
Press freedom	- 1,128 151	0,195	0,550	0,231	0,120	0,221	- 0,342
p	<b>0,000</b>	<b>0,073</b>	<b>0,000</b>	<b>0,014</b>	<b>0,010</b>	<b>0,002</b>	<b>0,000</b>
Standard deviation	0,105	0,107	0,155	0,091	0,037	0,069	0,057
Student t statistic	<b>- 10,749</b>	<b>1,825</b>	<b>3,552</b>	<b>2,533</b>	<b>3,775</b>	<b>3,213</b>	<b>5,990</b>
R <sup>2</sup>	0,416	<b>0,046</b>	0,155	<b>0,085</b>	0,132	<b>0,080</b>	0,187

Significant results are in bold; italics denote a very weak coefficient.

## Press freedom and health

Health plays a major role in human development. Its importance can be gauged from the prominence given to the subject in the MDGs. Three of the eight goals specifically address it:

- reducing under-five mortality (goal 4);
- improving maternal health (goal 5);
- combating HIV/AIDS, malaria and other diseases (goal 6).

These goals concern the well-being of both individuals (goal 6) and the community as a whole, and as the World Health Organization (WHO) pointed out in 2005: “Good health is a human right and a measure of human well-being. It is also a driver of growth: investments in health have positive economic returns. During the period 1965-1990, health and demographic variables accounted for as much as half of the difference in growth rates between Africa and the rest of the world.”<sup>33</sup>

This section provides a basic empirical analysis of the links between press freedom and certain health indicators. It sets out to examine the linear correlation between the two, and to this end the indicators were subdivided into three categories:

- indicators of health status;
- indicators of health spending;
- indicators of health resources.

The data used are from three different sources. The press freedom indicator is the one produced by Freedom House. The health indicators are taken from the World Bank database (World Bank Indicators, 2005) and the United Nations database (Millennium Indicators Database, 2005).<sup>34</sup> The United Nations data are based on national statistics or on estimates produced by various international organizations. Life expectancy at birth and the infant mortality rate are estimated by the United Nations Population Division (Revision of World Population Prospects, 2005) on the basis of national survey and census data. These data are five-year averages (table 9).

**Table 9. Main health indicators used**

	Variable	Source
Press freedom	Press freedom	Freedom House
Health status	Life expectancy at birth (years)	United Nations
	Infant mortality rate (per 1,000 live births)	United Nations
Health expenditure	Public health expenditure (% of GDP)	Word Bank
	Private health expenditure (% of GDP)	Word Bank
Health resources	Prevalence of HIV (% of people aged 15-49)	United Nations
	Number of doctors (per 1,000 inhabitants)	United Nations
	Births attended by skilled health personnel (%)	United Nations
	One-year-olds immunized against tuberculosis (%)	United Nations
	One-year-olds immunized against measles (%)	United Nations

## Press freedom and health status (life expectancy and infant mortality)

### Facts

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Several indicators are available for measuring the health status of an individual or a country's population. They include life expectancy, the mortality rate, the proportion of the population that is undernourished, tobacco consumption, obesity, etc. Life expectancy at birth is the most widely used of all these indicators since it takes account, indirectly, of other health indicators such as immunization rates, the prevalence of HIV and undernutrition, which influence the likelihood of dying young. Life expectancy at birth represents the average lifespan of a set of individuals aged under 1 and subject to the mortality conditions of the year concerned. It depends on a number of factors, both medical and otherwise. It is closely linked to the mortality rate. When a country's mortality rate falls, life expectancy improves.

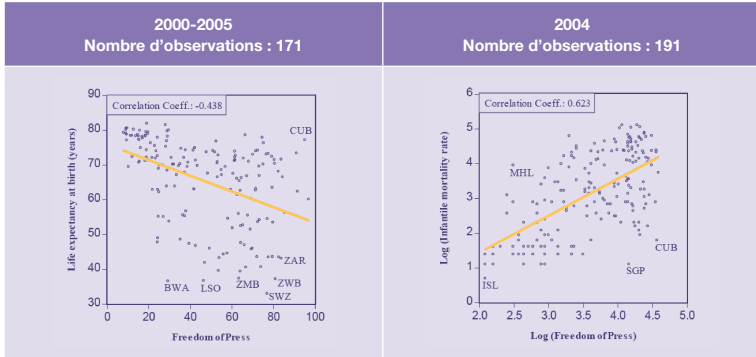
The infant mortality rate is the likelihood of death between birth and the child's first birthday (*Global Human Development Report*, 2005). It is one of the MDG health indicators, whereas life expectancy at birth is not.

### Interpretation

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The results obtained are highly significant and **figure 8** well illustrates the inverse relationship between the two variables.<sup>35</sup> The regression line for life expectancy at birth versus press freedom slopes downward, while that for infant mortality versus press freedom slopes upward. In other words, an improvement in press freedom is associated with a drop in infant mortality and an increase in life expectancy at birth. Four other observations can be made on the charts. First, in countries with a free press (press freedom indicator below 20), life expectancy is high. Second, in countries with a high HIV prevalence rate, life expectancy is fairly low irrespective of the degree of press freedom. The inhabitants of Botswana, which has a free press (press freedom indicator below 30), have a life expectancy at birth of 36.6 years, while in Zimbabwe, where the press is not free, life expectancy at birth is 37.2. Third, countries with a non-free press have a high infant mortality rate, unlike countries where the press is free. Lastly, Cuba is an outlier: although they do not have a free press, Cubans have a high life expectancy at birth (77.2) and a low infant mortality rate (6%).

**Figure 8. Health status and press freedom**



### Points to remember

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The above observations suggest, then, that press freedom has a positive impact on the health status of a country's inhabitants. In a democratic country where press freedom is assured, information about the needs of the population is well publicized by the press, which acts as a go-between between rulers and ruled. If the public authorities fail to respond adequately to the expectations of the population, they will often be criticized in the press and, most importantly, punished by voters at polling time.

A free press is thus a source of information for the public, pointing out the various shortcomings of public policies and relaying information that can potentially affect the well-being of individuals, including health information. A free press and an active opposition are an excellent resource for preventing crises, including famines, epidemics and economic crises (Sen, 1998).<sup>36</sup>

## Press freedom and health expenditure

### Facts

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The press plays an important role in democracy. As an agent of coordination between different interests, a free press reduces the information asymmetry

between rulers and ruled (Coyner and Leeson, 2004). A free press is the channel of communication between the public and its rulers, revealing the needs of the population and its attitudes towards public policies. In so doing, it keeps those in power informed of public expectations and automatically criticizes any ill-conceived public policy.

The health expenditure indicators examined here give an idea of the links between press freedom and health policies. The underlying hypothesis in each case is that a free press is associated with a high level of health spending (particularly by the public sector): individuals are better informed about dangers to their health and thus better placed to demand a right to health care from the government.

## Interpretation

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The regressions are significant and show a good linear correlation between press freedom and public health expenditure (**figure 9**, left-hand chart). Countries where the press is not free spend only a small share of their revenues on public health by comparison with most countries where the press is free. These countries are listed in the annex.

Cuba and Colombia are exceptions. Despite having a muzzled press, these countries devote a large proportion of their revenue to public health spending. Another finding revealed by **figure 9** is the absence of a linear correlation between press freedom and private health spending. The results are not very significant and the coefficient is very low.

**Figure 9. Health expenditure and press freedom**



- \* The Student *t* test, which measures the significance of the coefficients, indicates that the null hypothesis (correlation coefficient) can be accepted, meaning that the correlation coefficient is not significant and can be treated as equal to 0.

## Points to remember

In countries where the press freedom indicator is high, the press is not playing its role: it is not highlighting either the needs of the public or the shortcomings of public policies. In short, the press in these countries is no longer an instrument for conveying the diversity of opinion, in health as in other areas. The consequence is that the public is deprived of this means of exerting pressure on its rulers. Again, the latter are not automatically provided with feedback on reactions to the different policies applied. The end result is that revenue which ought to be used to respond to the public's health concerns is applied to other priorities, which are not necessarily those of the public.

The fact that press freedom and private spending move almost independently of each other suggests it is essentially public expenditure that the former influences positively. This finding bears out the initial analyses showing that press freedom affects a country's health status. Health carries a high cost which people on average incomes cannot meet by themselves. However, health is a fundamental individual right<sup>97</sup> and the State has an obligation to provide individuals with the resources needed for good health (Article 25 of the Universal Declaration of Human Rights). Consequently, countries are required to respond to the health expectations of their



people. In countries with a free press, neglecting this demand will lead to criticisms of public health policy.

## Press freedom and health resources

### Facts

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The resource indicators used are directly tied to the MDGs. They are, first, the proportions of one-year-olds who have been fully immunized against measles and tuberculosis, that is, have been given an antigen or serum injection containing specific antibodies acting against measles or tuberculosis (*Global Human Development Report, 2005*). The other indicators are for the presence of health personnel in the population, namely the number of doctors (holding diplomas from medical schools or faculties, whatever particular field they may actually work in) per thousand people and the proportion of births attended by skilled health personnel.

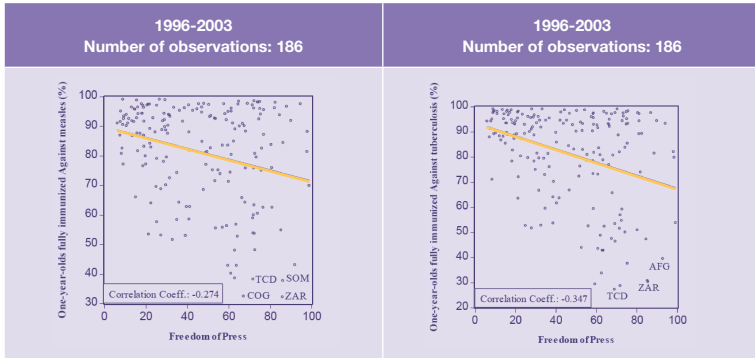
The hypothesis tested in these regressions is that press freedom more or less directly influences health resource indicators: by drawing attention to the lack of medical facilities available to individuals, the press can contribute to improvements in the situations that pose the greatest risks to the population, namely those where people lack access to all the care they need to live normally or, in some cases, even survive.

### Interpretation

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There is not such an obvious linear correlation between press freedom and health resources as between press freedom and health expenditure or health status (**figure 10**). These results need to be interpreted cautiously: although the regressions are significant and the sign of the correlations fits the hypotheses, thereby confirming the preceding analyses, the estimates are poor ( $R^2$  is quite low). Other factors of far greater importance than press freedom thus come into play. For example, the number of doctors per inhabitant cannot be improved by press freedom alone, but depends on education policy and the resources the country has available to support the profession. Nonetheless, some conclusions can be drawn from the charts in **figure 10**.

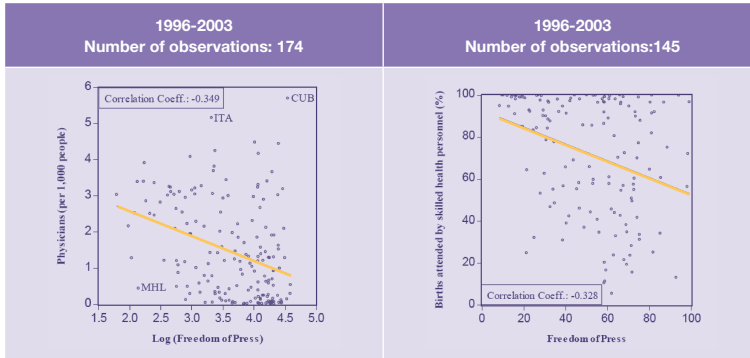
**Figure 10. Immunization rate and press freedom**



There is a small positive correlation between press freedom and immunization rates. This suggests that a free press is associated with a higher rate of immunization. And indeed, immunization rates are very high in countries with a free press such as Belgium, Germany and Denmark. It is in countries such as the Democratic Republic of the Congo and Afghanistan, where press freedom is generally lacking, that immunization rates are lowest. It is interesting to note, lastly, that countries where the press freedom indicator is 60/55 or below (free or partially free press) often have immunization rates of 50% or more.

The regression between press freedom and the number of doctors is significant (**figure 11**): the correlation is low but positive, which means that, other than in Cuba (the country with the most doctors but a muzzled press) and Russia (good level of press freedom but few doctors), there are more doctors per inhabitant in countries where press freedom exists. The countries situated along the abscissae are Angola, Bhutan, Burundi, Burkina Faso, Cameroon, Chad, Comoros, Côte d'Ivoire, the Democratic Republic of the Congo, Eritrea, Ethiopia, the Gambia, Ghana, Guinea, Liberia, Malawi, Mali, Mozambique, Nepal, New Guinea, Niger, Rwanda, Senegal, Sierra Leone, Somalia, Togo, Uganda, United Republic of Tanzania and Zimbabwe. The same holds true for the number of births attended by health personnel.

**Figure 11. Health personnel and press freedom**



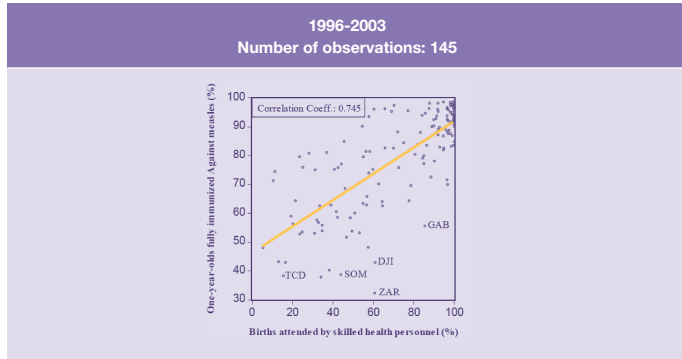
### Points to remember

These regressions between press freedom and health resources bear out the hypothesis put forward at the start: a free press is instrumental in improving medical conditions for individuals. In conflict or post-conflict countries (Somalia, Afghanistan, Democratic Republic of the Congo), major international public health operations undertaken by WHO and individual States, including immunization against measles and tuberculosis, have proved difficult to implement, and it is logical that immunization rates should be low in those countries.

One theory is that immunization rates are low when the number of health personnel is also small. A simple regression between the number of births attended by a health worker and the rate of immunization against measles provides a simple confirmation of this theory: as **figure 12** shows, the correlation between these two variables is very high. Countries where births can be attended by people with medical training are thus also those that have the highest immunization rates. The few countries that are outliers in this respect are in either a conflict or a post-conflict situation (Chad, Somalia and Democratic Republic of the Congo, among others). A claim made in *The World Health Report 2006*<sup>38</sup> is amply borne out here: “Cutting-edge quality improvements of health care are best initiated by workers themselves because they are in the unique position of identifying opportunities for innovation. In health systems, workers function as gatekeepers and navigators for the effective, or wasteful, application of all other resources such as drugs, vaccines and supplies.”

According to this report, there is a shortfall of almost 4.3 million doctors, midwives, nurses and support workers around the world. The shortage is most severe in the poorest countries, especially in sub-Saharan Africa.

**Figure 12. Health personnel and immunization**



It can be concluded from these regressions, then, that press freedom is important for improving medical conditions, and thus health conditions as well. Nonetheless, the press alone cannot have a great influence on the medical infrastructure available to the population. As *The World Health Report 2006* puts it: “Health crises of epidemics, natural disasters and conflict are sudden, often unexpected, but invariably recurring. Meeting the challenges requires coordinated planning based on sound information, rapid mobilization of workers, command-and-control responses, and intersectoral collaboration with nongovernmental organizations, the military, peacekeepers and the media.”

## Press freedom and HIV prevention

### Facts

The purpose of this subsection is to draw attention to one of the main sources of mortality in sub-Saharan Africa, human immunodeficiency virus (HIV). Reducing the prevalence of this disease is one of the MDGs, and numerous actors are involved in this effort (States and international and non-governmental

organizations). The indicator chosen by the United Nations is the HIV prevalence rate, namely the percentage of people aged 15 to 49 who are infected by this virus. The hypothesis tested here is, of course, that press freedom indirectly helps to stem the epidemic.

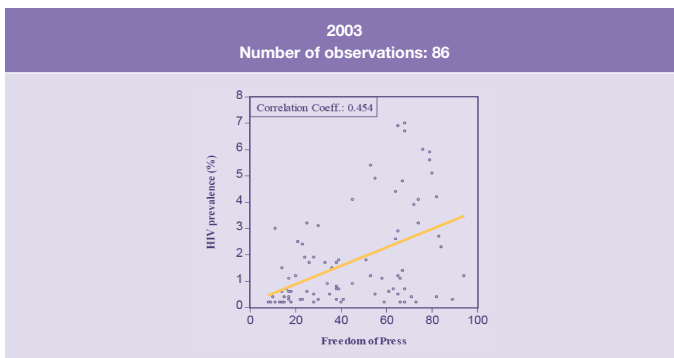
## Interpretation

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The correlation between press freedom and the HIV prevalence rate is very low. Among 148 countries for which HIV prevalence statistics were available in 2003, there was a positive correlation coefficient of 0.14. This ratio is not significantly different from 0, however. In other words, these data suggest a lack of linear correlation between press freedom and HIV prevalence.

However, these 148 countries can be divided into three groups: those with a high HIV prevalence rate (over 8%), those with a low HIV prevalence rate (0.1%), and those with an HIV prevalence rate of between 0.1% and 8%. **Figure 13** shows that there is a positive linear correlation between press freedom and the HIV prevalence rate in the latter group. This bears out the findings of Jacob Bor (2005), who, working with a group of 54 countries, found a positive and significant correlation coefficient of 0.32 for 2003. The countries in the bottom left-hand corner are Belgium, Canada, Switzerland, Costa Rica, Denmark, Spain, France, the United Kingdom, Iceland, Luxembourg, Lithuania, Malta, the Netherlands, Portugal and the United States. No country combined a prevalence rate of more than 3% with a press freedom score of less than 50%.

**Figure 13. HIV prevalence rates and press freedom**



The sample for **figure 13** covers 86 of the 148 countries for which data are available. Countries with a high HIV prevalence rate (over 8%) were excluded from the sample. There were 12 of these, all in southern Africa (**table 10**). However, it is hard to argue that there is a correlation between press freedom and prevalence rates, since a country like Gabon, with a press freedom score of 58, has an HIV prevalence rate of 8.1%, whereas Botswana, with a press freedom score of 30, has a prevalence rate of 37.3%.

**Table 10. Countries with an HIV prevalence rate above 8%**

Country	HIV prevalence rate	Press Freedom
Botswana	37,3	30
Central African Republic	13,5	67
Gabon	8,1	58
Lesotho	28,9	42
Mozambique	12,2	47
Malawi	14,2	57
Namibia	21,3	37
Swaziland	38,8	74
Tanzania	8,8	47
South Africa	15,6	25
Zambia	15,6	63
Zimbabwe	24,6	88

Countries with an HIV prevalence rate of 0.1% were also excluded (51 countries). This group includes the countries of the Middle East (e.g. Egypt, Syrian Arab Republic and Iraq), which do not have a free press, and the developed countries (e.g. Norway and Japan), which do. With a group like this, it is hard to find a linear correlation between press freedom and HIV prevalence rates.

### Points to remember

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There are good theoretical arguments to suggest that press freedom makes it more likely that sound HIV policies will be introduced. By reiterating the various implications of HIV for individuals and countries, the press not only keeps the public and government informed but helps to narrow any divide between current practices and “best” practices. These theoretical arguments are borne out empirically, and

indeed the correlations are quite strong. It must not be forgotten, though, that there are countries where HIV prevalence rates are still high despite a fairly free press.

## Summary of the links between press freedom and health indicators

Taken all together, then, the regressions established between press freedom and health indicators are highly significant and confirm the importance of press freedom for human development. Analysis of the data suggests that press freedom is good for health indicators. By revealing public expectations and shortcomings in public policies, the press provides those in government with the means to correct the latter, in the area of public health as elsewhere. As a source of public information, meanwhile, the press provides citizens with the material they need to reach their own conclusions about good health-care practices and to evaluate the performance of their governments.

**Table 11. Estimation of coefficients by the ordinary least squares method**

	Equation 1 Life expectancy at birth	Equation 2 Infant mortality	Equation 3 Public health expenditure	Equation 4 Private health expenditure	Equation 5 Immunization against tuberculosis	Equation 6 Vaccination contre la tuberculose	Equation 7 Doctors per 1,000 inhabitants	Equation 8 Prevalence of HIV
Press freedom	- 0,237	1,066	- 1,761	0,128	- 0,184	- 0,261	- 0,683	0,035
Standard deviation	0,037	0,097	0,157	0,161	0,048	0,052	0,140	0,007
Student t Statistic	<b>- 6,665</b>	<b>10,959</b>	<b>11,195</b>	<b>0,796</b>	<b>- 3,863</b>	<b>-5,022</b>	<b>-4,885</b>	<b>4,667</b>
p	<b>0,000</b>	<b>0,000</b>	<b>0,000</b>	<b>0,427</b>	<b>0,000</b>	<b>0,000</b>	<b>0,000</b>	<b>0,000</b>
R <sup>2</sup>	0,191	0,389	0,409	0,003	0,075	0,121	0,122	0,206

Significant results are in bold; italics denote a very weak coefficient.

As with the earlier studies, this approach cannot demonstrate a causal link between press freedom and better health. It can only provide a basis for theories about “possible” mechanisms to account for the relationships of interdependence

between the variables. Again, this approach is very fragile and depends on the validity of the data used (table 11).

## Press freedom and education

As already suggested on a number of occasions, this dimension of human development is critical if societies are to live up to their potential. Nonetheless, people in developing countries cannot concentrate on education if their personal, financial and food security is under threat (access to resources, health, violence). Hence education is the last aspect to be studied in this chapter.

The relationship between press freedom and education can be approached in two ways. The more straightforward is to look at the influence of education on press freedom. The more educated and informed a population is, the more access it will have to the media and the more it will demand greater press freedom. The second relationship, which is less intuitive but equally of interest in view of the recommendations that flow from it, concerns the impact of press freedom on education. The underlying idea is that a country where press freedom is guaranteed will assuredly enjoy a dynamic of constant improvement in its educational performance, an essential pillar of development.

To compare these two relationships, the analysis first uses the education index to obtain an overview of education. It then goes on to estimate the impact of press freedom on the different education indicators by considering the following:

**Table 12. Indicators considered in the regressions**

Dimensions	Variable	Source
Literacy	Literacy rate among adults aged over 15 (%)	ISU
School enrolment	Net primary enrolment ratio (%)	ISU
	Net secondary enrolment ratio (%)	ISU
Education expenditure	Public education expenditure (% GDP)	ISU



- the adult literacy rate;
- primary and secondary school enrolment ratios;
- public education expenditure as a percentage of GDP.

These different indicators are calculated by the UNESCO Institute for Statistics (UIS) ([table 12](#)).

The main hypothesis tested here is that press freedom is positively correlated with education in general, but also with each of the different dimensions identified for it in this study. An improvement in press freedom can enhance educational performance by revealing shortcomings in the school and university system and by allowing public policies in this area to be evaluated.

## Press freedom and the education index

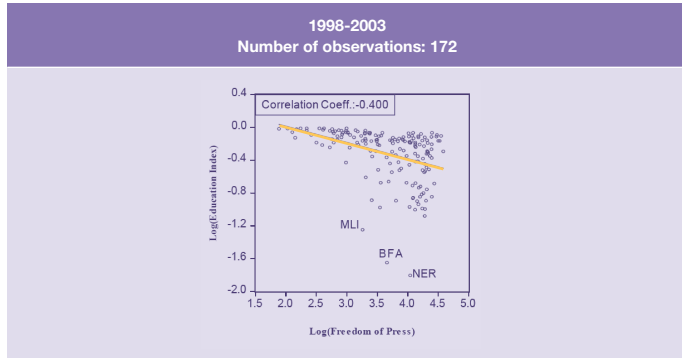
### Facts

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The education index has a range of 0 to 1 and measures education coverage (gross enrolment ratio at the primary, secondary and higher levels) and adult literacy in the country concerned. The procedure consists, first of all, in calculating one score for adult literacy and another for enrolment. These two scores<sup>39</sup> are then combined to form the education index, with adult literacy receiving a two-thirds weighting and the gross enrolment ratio a one-third weighting. The closer this index is to 0, the lower the level of education. The closer it is to 1, the higher the level of education.

The correlation between the two variables is more significant when they are turned into logarithms. With the education index ranging from 0 to 1, it is normal to observe negative values for this index. The regression will be carried out for the effect of education on the press, after which the reverse effect of the press on education will be considered ([figure 14](#)).

**Figure 14. Education index and press freedom**



## Interpretation

The regression is statistically significant and most of the countries observed have quite a high education index value, irrespective of the degree of press freedom. The outlier countries here are Mali, Niger and Burkina Faso. These countries score very low on education (owing to a very low literacy rate), even though their press is not necessarily any less free than that of countries with a higher level of education.

Some outlier countries have a high education index value (over 0.8) but score quite poorly on press freedom (a press freedom indicator value of more than 80). These are Belarus, China, Cuba, Libya, Tajikistan, Thailand, Togo and Uzbekistan. In 2005, all these countries except Thailand were classified as “not free” (in terms of civil liberties and political rights) by Freedom House. Their authorities have certainly put a great deal of effort into education, but the press is still muzzled.

Regarding the impact of education on press freedom, the estimated coefficient of the education index is minus 51.95. Empirical analysis thus bears out the presupposition that education has a major impact on press freedom. When the opposite relationship is tested, the estimated press freedom coefficient is just 0.198. Comparing these two results clearly shows that education influences press freedom more than the press influences education.

## Points to remember

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Education plays a crucial role in press freedom and influences it more than press freedom influences education. This result was fairly predictable: whereas education provides access to fundamental rights, including press freedom, the opposite relationship is not so obvious. It is logical for a population that has access to knowledge and thus to information to demand greater transparency and more press freedom. As the *Education for All Global Monitoring Report* (UNESCO, 2002) points out, education is a fundamental right laid down in the Universal Declaration of Human Rights (1948). But education is also a way of “unlocking” other rights. Education is an essential pillar for implementation of the rights to health, freedom, security, economic well-being and participation in social and political life. When the right to education is guaranteed, individuals can easily obtain access to and enjoyment of other rights.

Nonetheless, the press can be used to highlight certain failings of the education system and the correlation coefficient obtained underlines the importance of its potential role. The cases of some outlier countries show that a low level of education is due more to structural factors than to press freedom. From the broad human development perspective adopted here, a high level of education is impossible without economic, food and health security. Press freedom alone cannot improve a country's education level. There are other variables more significant for the level of education, such as the resources allocated to it, but also more general conditions such as the country's political climate, its economic performance, the health status of its population, and so forth.

It needs of course to be stressed that there is nothing automatic about the relationships identified here: some variables such as the political regime (authoritarian or democratic) also need to be taken into account, since education alone cannot account for press freedom. Furthermore, the approach is a quite general one and does not provide a very precise idea of the actual content of education, the literacy profile, the branches of learning to which priority is given (literary, scientific), and so on. These different elements also influence the perception of the press and, ultimately, the demand for press freedom among the population at large.

## BOX 5

**The virtuous circle of education?**

It is interesting to note that, in some countries, education has not created a virtuous circle leading to greater press freedom.

To take the example of Burkina Faso, the 2002 Education for All National Action Plan (Ministry of Basic Education and Literacy of Burkina Faso) emphasized that “underdevelopment and stagnation” in the education sector were chiefly due to structural causes:

- extreme household poverty. In 1995, between 30% and 40% of households were below the poverty line;
- the population explosion. The high costs of school enrolment and the large number of children per household discouraged parents from enrolling all their children in school;
- teaching quality. This is also called into question, particularly at literacy centres, where the numbers enrolled have increased without there being any corresponding rise in the literacy rate.

There are also some secondary causes, such as:

- the importance of the Koranic schools, which draw in many street children (almost half of all street children have attended these schools);
- the large number of children under the age of 15 who have been orphaned by AIDS. UNAIDS put this number at 320,000 in 1999.

These different factors are important if we are to understand the mechanisms underlying the links identified in this study. The press can contribute to human development, but it also needs fertile soil to grow in, and education is one of the main forces that can help it develop in its turn.

Since the education indicator is fairly general, it is interesting to see how press freedom can more specifically influence particular aspects of education (box 5).

## Press freedom and the different education indicators

### Press freedom and adult literacy

#### Facts

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The adult literacy rate is the percentage of people aged 15 and over who can read, write and understand a short, simple text about everyday life. Published

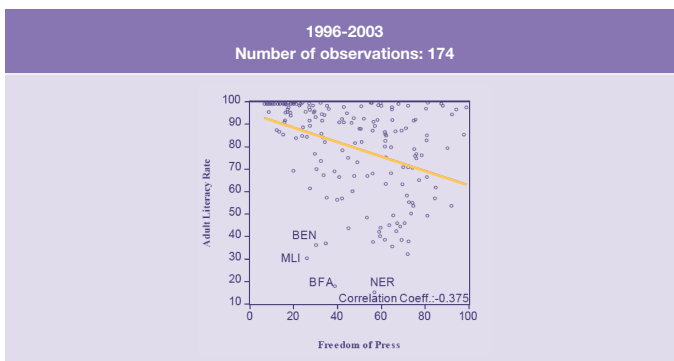
by the UNESCO Institute for Statistics (UIS), this indicator certainly gives an overview of illiteracy in a given country, but it is quite general and needs to be handled with caution. The hypothesis tested here is that greater press freedom produces an improvement in the literacy rate of the population.

## Interpretation

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The regression is statistically significant and the direction of the relationship is as expected (**figure 15**). The impact of press freedom is limited, however. The countries lined up at the top left are industrialized ones such as Australia, Austria, Canada, Japan, Norway, Sweden and the United States. All countries with a free press have a literacy rate above 85%. The area below the regression line does not require much comment: just a few outlier countries such as Mali, Benin and Burkina Faso are marked by their combination of a fairly free press with a very low literacy rate.

**Figure 15. Adult literacy rate and press freedom**



## Points remember

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The figures provide good empirical confirmation of the expected correlation: a free press is associated with a good literacy rate in the population. Because people can read, they are able to enforce and protect their rights and push for greater press freedom. However, some countries have very good literacy rates but do not possess a free press.

The adult literacy rate indicator should be handled with caution. It often underestimates the level of illiteracy, as the people questioned are reluctant to admit to being illiterate. At the same time, as the UIS notes, this indicator is rather simplistic because it only divides the population into two subgroups, those who are illiterate and those who are not. It would certainly be more useful to establish the literacy profiles of populations. This would give a more accurate idea of individual capabilities.

## Press freedom and enrolment ratios

### Facts

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The enrolment ratio, at both the primary and secondary levels, gives the number of pupils enrolled in a particular educational level and meeting the official age requirements for that level. This information is expressed as a percentage of the total population of individuals in the relevant age group. The hypothesis being tested is the same as before, namely that a good level of press freedom should logically have a positive correlation with a good level of school enrolment.

### Interpretation

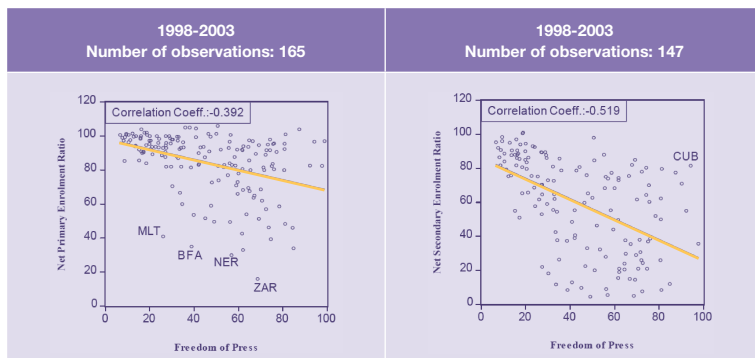
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The regressions obtained are statistically significant and the direction of the correlations is as expected (**figure 16**). When the two charts are compared, press freedom appears to have a greater effect on enrolment at the secondary level than at the primary level. The correlation coefficient between press freedom and the enrolment ratio, and the estimated coefficient for the effects of press freedom on the enrolment ratio, are higher for the secondary than for the primary level.

The countries situated in the upper left-hand quadrant of each chart are Belgium, Canada, Japan, Norway and Sweden.

No country with a free press has a primary enrolment ratio of less than 80% (except Malta) or a secondary enrolment ratio of less than 50%.

**Figure 16. School enrolment ratio and press freedom**



### Points to remember

The above observations can be explained by the higher rate of enrolment at the primary level: the second MDG is to “achieve universal primary education”. Work is still needed to attain this goal, of course, but the figures are positive overall since the average net primary enrolment ratio for all the countries observed is 84.8%, whereas at the secondary level the ratio is just 59.9%. It is on secondary school enrolment that most work needs to be done, therefore, and press freedom can play an active role here.

Press freedom alone cannot ensure this kind of progress with enrolment ratios, however. For this there needs to be real political will plus substantial and well-allocated public education spending. The role of a free press will be to provide information and reveal shortcomings in this area.

### Education expenditure and press freedom

#### Facts

Education expenditure encompasses both capital spending (construction, renovation, large-scale repairs and purchases of heavy equipment or vehicles) and current spending (goods and services consumed during the current year and needing to be renewed the following year). This indicator includes staff salaries

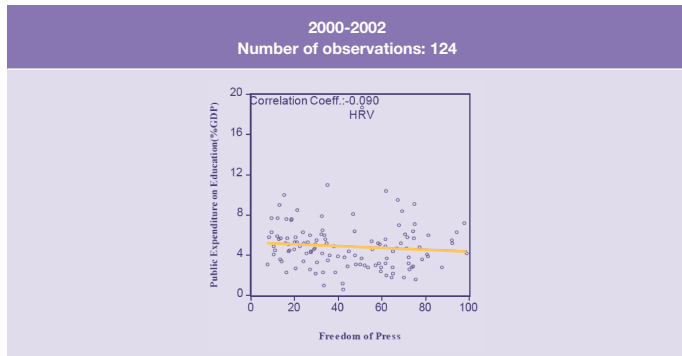
and social charges, the purchase or supply of services, books and other teaching materials, social assistance, furnishings and equipment, minor repairs, fuel, insurance, rent, telecommunications and teaching-related travel costs. It should be handled with caution as it is based on national statistics and may in some cases be underestimated.

## Interpretation

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While the impact of press freedom is very significant for all the education indicators examined so far, this is not the case with public education spending: the correlation rate is low and the estimated coefficient is not significant (**figure 17**).

**Figure 17. Public education expenditure and press freedom**



## Points to remember

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This finding does not mean that there is no relationship between the two variables, but rather that press freedom may have only a limited influence on the expenditure allocated by the State to education. Even if the relationship between press freedom and public education expenditure is not established, this does not invalidate the relationship between press freedom and education more generally. The fact is that public education spending is not always a good guide to the level of education attained in the country concerned; to obtain a more accurate picture, it would be necessary to evaluate education spending for effectiveness. A narrower approach focusing on specific items of expenditure (school building, teaching



personnel costs, etc.) would certainly yield a higher rate of correlation with press freedom.

## Summary of the links between press freedom and education indicators

The second MDG lays down the challenge of universalizing primary education in all States by 2015. “As an empowerment right, education is the primary vehicle by which economically and socially marginalized adults and children can lift themselves out of poverty, and obtain the means to participate fully in their communities.” Amartya Sen’s approach sees education as crucial to increasing the capabilities of individuals and thus developing real freedoms. Access to education allows people first to acquire basic skills (reading and writing) and then to remedy circumstances that are detrimental to human development. For example, compulsory primary education reduces the prevalence of child labour. Meanwhile, access to education empowers disadvantaged groups, particularly women. Education makes it easier for these groups to enforce their own rights. And it is here that the press has an essential intermediary role to play; education can help make it freer, since individuals can then access it and use it to defend their rights.

Conversely, the findings show that press freedom can increase the level of education: even if the impact of press freedom is limited, it still has a positive effect on the education level. There is nothing automatic about the relationship, of course, since the structural conditions in a country have a greater impact than press freedom by itself. Universal education access cannot be achieved until certain basic human security thresholds are reached, meaning a stable political climate, lower poverty and better health care.

Lastly, the indicators considered in this study are essentially quantitative, whereas education also needs to be approached in qualitative terms (this aspect is dealt with by the 2005 *Education for All Global Monitoring Report*). Thus, a country’s adult literacy rate certainly tells us about the level of illiteracy there, but it provides no information about literacy profiles. Likewise, enrolment ratios give a picture of education access, but a rather oversimplified one. This study could thus be extended by examining the learning attainments of students, the average amount of time spent in the education system, and so on. Education needs to be approached

both quantitatively and qualitatively, and press freedom can play a crucial role in both these aspects (table 13).

**Table 13. Estimation of coefficients by the ordinary least squares method**

	Equation 1 Education index	Equation 2 Adult literacy rate	Equation 3 Net primary enrolment ratio	Equation 4 Net secondary enrolment ratio	Equation 5 Public expenditure on education
Press freedom	- 0,198	- 0,18	- 0,29	- 0,60	- 0,008
Standard deviation	0,034	0,061	0,055	0,082	0,008
Student <i>t</i> statistic	<b>- 5,693</b>	<b>- 5,311</b>	<b>- 5,442</b>	<b>- 7,319</b>	<b>- 1,001</b>
p	<b>0,000</b>	<b>0,000</b>	<b>0,000</b>	<b>0,427</b>	<b>0,318</b>
R <sup>2</sup>	0,160	0,130	0,153	0,262	0,075

Significant results are in bold.

- 29 [Http://www.wider.unu.edu/wiid/wiid.htm](http://www.wider.unu.edu/wiid/wiid.htm).
- 30 Human Development Reports 2000-2002 on CD-ROM.
- 31 United Nations Human Development Report 2005, [http://hdr.undp.org/reports/global/2005/pdf/HDR05\\_chapter\\_2.pdf](http://hdr.undp.org/reports/global/2005/pdf/HDR05_chapter_2.pdf).
- 32 "[...] a free press and active political opposition constitute the best early-warning system a country threatened by famines can have" (A. Sen, 1999).
- 33 WHO (2005).
- 34 <http://mdgs.un.org/unsd/mdg/> (consulted in February 2006).
- 35 It must be stressed that the infant mortality rate is not the same as a country's overall mortality rate. However, the chart gives an idea of the direction of the relationship.
- 36 See footnote 4.
- 37 "The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition" (WHO Constitution, [http://www.who.int/governance/eb/who\\_constitution\\_en.pdf](http://www.who.int/governance/eb/who_constitution_en.pdf)).
- 38 [Http://www.who.int/whr/2006/en/index.html](http://www.who.int/whr/2006/en/index.html) (consulted on 11 April 2006).
- 39 They will be presented in more detail in the follow-up study.
- 40 In correlation and graphic terms, all we do is invert the first relationship, so the results do not change.
- 41 This aspect will be considered in detail in the following section.
- 42 [Http://portal.unesco.org/education/en/ev.php\\_URL\\_ID=18845&URL\\_DO=DO\\_TOPIC&URL\\_SECTION=201.html](http://portal.unesco.org/education/en/ev.php_URL_ID=18845&URL_DO=DO_TOPIC&URL_SECTION=201.html).

# Press freedom and governance

## Press freedom and governance

**A**s has been shown, development is a complex process in which the press can play a fundamental role by making individuals aware of their rights and of the freedoms they should logically enjoy in a democratic system. It is that system as a whole that is appraised here in relation to the press.

Governance is situated both upstream and downstream of this process. It influences every stage of development. From a human standpoint, a secure environment and an effective State provide individuals with a guarantee of physical safety, education and high-quality care. From an economic standpoint, good governance is conducive to growth and thus to poverty reduction. Demonstrating the positive role of press freedom in the development and establishment of a stable, rule-based institutional environment is thus tantamount to demonstrating the impact of the press on economic and social progress. There is now a broad consensus among economists on the link between economic development and governance. Good governance is indispensable for a stable business climate and is particularly conducive to higher individual incomes over the long term. This positive impact comes out in numerous studies.<sup>43</sup>

This chapter will now concentrate on the correlations between press freedom and the different dimensions of governance, as measured by six indicators produced by the World Bank in recent years (table 14).<sup>44</sup> These indicators capture and quantify the subjective dimension of governance: the perception of the institutional environment, and likewise the difficulty and risk of starting a new business, do not depend solely on objective factors like the legal framework or tax system. People's decisions and ability to act also depend on their perception of the degree

of corruption among government officials, the protection given to private property, and the credibility of government policies and announcements. By analysing the impact of press freedom on this perception of the environment as measured by governance indicators, it will thus be possible to determine how far press freedom favours economic and human development. The aim of this approach is thus to capture the systemic dimension of development and the specific role played by press freedom in bringing about effective, development-friendly governance.

**Table 14. Governance indicators useds**

	Variable	Source
Press freedom	Press freedom	Freedom House
Political dimension	Voice and accountability	World Bank
	Political stability and absence of violence	World Bank
Institutional dimension	Regulatory quality	World Bank
	Government effectiveness	World Bank
Legal dimension	Rule of law	World Bank
	Control of corruption	World Bank

Analysing the links between these six indicators and press freedom provides an overview of the influence of press freedom on three essential components of development: the political dimension (individual rights and political stability), the institutional environment (role of the State and regulation) and the existence of a legal framework (security and the rule of law).

## Press freedom, rights and political accountability

In addition to press freedom, the “voice and accountability” indicator reflects perceptions of government accountability, the credibility of political institutions and civil and political rights. It measures the ability of citizens to participate in the selection and renewal of governments. It also includes media independence. Partly by construction, this is bound to be highly correlated with press freedom, but that

does not make it any the less representative of the link between civil liberties, political and civil rights, human rights, government accountability and press freedom. The correlation between this indicator and press freedom was calculated in the course of the research, but it has not been reproduced here because the relationship presents a high degree of endogeneity: since the indicator included data on press and media freedom, the correlation coefficient was close to 1 and difficult to exploit. This section therefore concentrates on the political stability indicator.

## Facts

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Political stability is an essential component of governance. The quality of the latter depends on there being confidence in the continuity of the policies implemented, a parameter covered by the World Bank indicator “Political stability and absence of violence”, which measures perceptions of the likelihood that the government of the day will be overturned and replaced by violent or unconstitutional means. What is evaluated here, then, are confidence in the solidity of political institutions and the absence of political violence. The hypothesis tested is that a free press helps to improve the political stability of the system within which individuals operate.

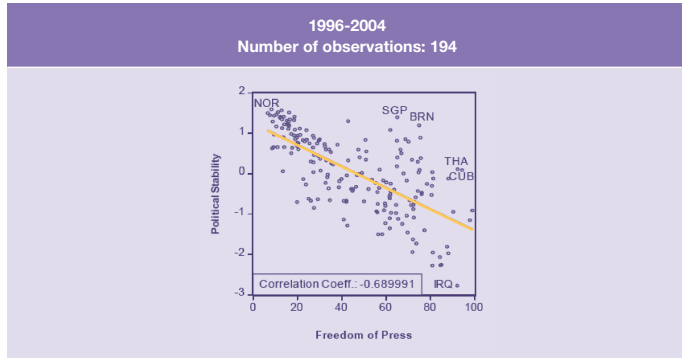
## Interpretation

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As **figure 18** indicates, political stability is positively correlated with press freedom. The regression obtained is strongly significant and the correlation coefficient is high: press freedom is thus strongly associated with political stability.

The countries in the top left-hand quadrant, such as Norway, Switzerland and Finland, have a free press and a stable political system. This stability means that there can be continuity in public policies and that ideological or ethnic disputes can be settled democratically.

The cases of Cuba and North Korea, where low press freedom goes with an intermediate level of political stability, can be explained by the political longevity of the governments in place.<sup>45</sup>

**Figure 18. Political stability and press freedom**

### Points to remember

Contrary to the claim often made by detractors of the media that journalists cause political instability and upheaval, it actually transpires that a free press is strongly associated with political stability and is one of its firmest underpinnings. This correlation clarifies our understanding of the link between governance and press freedom: by allowing dialogue and debate, countries which succeed in establishing a free press provide a non-violent method of airing disagreements. Conversely, by facilitating discussion and argument, a free press plays a role in regulating society: it is an instrument of regulation and not disorder. This characteristic is one of the fundamental attributes of press freedom, which thus emerges as a tool for bringing to light social tensions which might otherwise lead to violent upheavals. Press freedom is actually a useful instrument of governance for those in power.

# Press freedom and institutions

## Press freedom and government effectiveness

### Facts

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The World Bank “government effectiveness” indicator measures the effectiveness of the State and its provision of services, mainly by estimating the supply of public services, the quality and independence of the civil service and the credibility of policies. What is being measured here, then, is the perception actors have of the ability of the State, working through the civil service, to fulfil its role. A free press must logically influence the effectiveness of government, not least by holding those in power to the pledges they have made and monitoring the effectiveness or otherwise of public policies. The press needs to be there to take the government to task when it fails to respect individual freedoms.

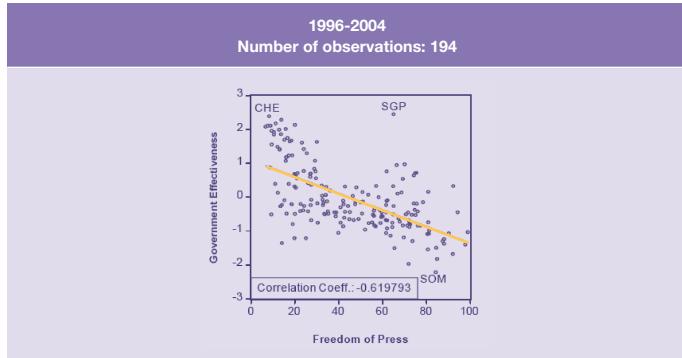
### Interpretation

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The statistical correlation obtained is highly significant (**figure 19**). Countries where the “government effectiveness” indicator is well above 1 all have a free press; these are also the countries that provide the most effective public services (Norway, Switzerland, Netherlands, Sweden). Some countries have a free press (index value below 30) but a government effectiveness value of between minus 2 and 0; these include Belize, Bolivia, the Dominican Republic, Micronesia, Guyana, Jamaica, the Marshall Islands, Mali, the Solomon Islands and San Marino. They show that a free press is not systematically associated with a satisfactory perception of State services: most island States suffer in this way from ineffective public services and administration, despite a free press.



**Figure 19. Government effectiveness and press freedom**



Conversely, with the exception of Singapore, no country combines a high “government effectiveness” indicator value (over 1) with a non-free press.

### Points to remember

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This regression confirms that a free press is indispensable for high-quality public services, a competent and independent civil service and public policies commanding a high degree of confidence. Outside of island States, it is clear that the press plays an important role in any State where there is a concern about effective policy follow-through. The vigilance of the press, and its ability to expose shortcomings in any public policy, make it the most indispensable tool of effective public action, and one that is responsive to the expectations of users.

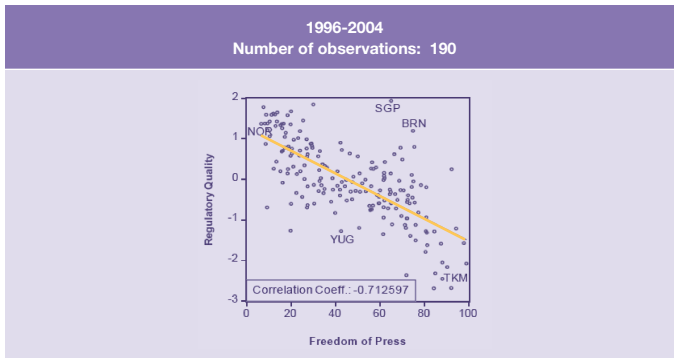
## Press freedom and regulation

### Facts

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The dimension of governance that the “regulatory quality” indicator is used to analyse measures the impact of policies harming the investment climate and obstructing the market, such as price controls or over-regulation of foreign trade. The initial hypothesis is that a free press can improve the quality of this regulation by publicizing and highlighting certain aspects of it (figure 20).

**Figure 20. Regulatory quality and press freedom**



## Interpretation

This is undoubtedly the correlation that most clearly brings out the close connection between economic development and press freedom. Its statistical significance level is very high and shows that States which create an institutional environment conducive to economic development are also those where press freedom is strongest. Thus, with the main exception of Singapore once again, but also of Brunei Darussalam, all States which score more than 1 on the governance indicator being considered here have wide-ranging press freedom. The two exceptions named cannot counterbalance the very heavy concentration of States in the top left-hand corner of **figure 20** (Norway, Netherlands, etc.). Again, in all countries where regulatory quality is below minus 2, press freedom is circumscribed in all sorts of ways.

## Points to remember

This regression confirms the importance of the press in guaranteeing individuals a sound regulatory framework within which they can successfully pursue their economic activities. Without it, it is very difficult to maintain the trust that is needed in business, for example. The role of the press is critical here: clear, enforced rules are essential to economic development.

## Summary of the links between press freedom and institutions

The aim of governance is to ensure the smooth running of the economy and enable the State to meet its obligations towards citizens. This twofold purpose, at once social and economic, is directly linked to the quality of institutions. Institutions, and the civil service in particular, provide the services that are essential for a country to operate, while laws are needed to create the conditions for economic development. The positive and systematic correlation between the institutional environment and press freedom thus yields the following lessons: press freedom is an indispensable instrument for any government concerned with the effectiveness of public policies and the civil service. Likewise, it cannot be sacrificed without jeopardizing economic development: it is conducive to the creation of an appropriate legal framework and ensures the smooth functioning of the economy. It is an enabler of economic development and can enhance the effectiveness of public action.

## Press freedom and the rule of law

### Press freedom and the legal framework

#### Facts

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The World Bank “rule of law” indicator measures the effectiveness and independence of the courts and police, confidence in contract enforcement and, more generally, how stakeholders perceive the application of the law. It takes account of factors that are indispensable to a society’s socio-economic development, including the degree of protection for property rights.

## Interpretation

Figure 21 shows a regression line establishing the positive correlation between press freedom and the rule of law. The regression obtained is statistically significant to a high degree and the correlation coefficient is also high: press freedom is closely associated with the rule of law.

**Figure 21. Rule of law and press freedom**



The countries in the top left-hand quadrant, including Norway, Switzerland and Finland, are those where the rule of law is strongest and press freedom greatest.

## Points to remember

Statistically, there is a highly significant correlation between the enforcement and independence of court rulings and the existence of and respect for the rule of law (and thus property rights), on the one hand, and press freedom on the other. The link between the effective rule of law and a free press is well established, even though Singapore, principally, is once again an exception. Conversely, it also transpires that no country with a value of less than minus 1 for this indicator scores below 60 on press freedom. This is unquestionably one of the most important correlations to establish, given the crucial role that law enforcement plays in a country's development.

## Press freedom and corruption

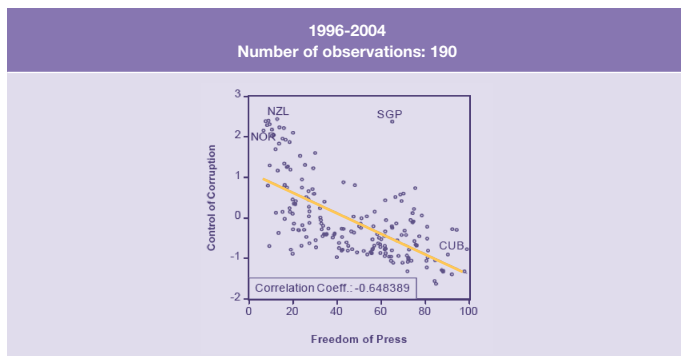
### Facts

The “control of corruption” indicator measures perceptions of corruption in its various guises. The indicators used encompass both petty corruption in public administration (e.g. when obtaining official documents) and grand corruption affecting the business climate or political life. By flouting the rule of law, corruption damages the foundations of good governance.

### Interpretation

The statistical correlation between press freedom and corruption is highly significant too (**figure 22**). With the exception once again of small island States that have governance difficulties, there is a very clear divide between States with a governance score higher than 1 and the rest. In places where corruption has not been controlled, as in Cuba, Belarus, Haiti and Iraq, the press is monitored and constrained. The countries with the freest press, conversely, are also those with the least corruption (Norway, Switzerland, Sweden and New Zealand). Singapore is the only one of the 190 countries in the regression to combine a low level of corruption with a lack of press freedom.

**Figure 22. Control of corruption and press freedom**



## Points to remember

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The link between press freedom and corruption has already been highlighted by a number of publications<sup>46</sup> and this analysis bears out the results generally observed: a lack of press freedom is strongly correlated with high levels of corruption. Where corruption is pervasive, journalists are subject to all kinds of pressures and people are generally not free to express themselves as they wish. Conversely, the press can play an important role when it starts to attack corrupt practices and individuals become aware that other individuals are not behaving as they ought if the country is to develop without impediment. While press freedom does not solve the problem of corruption, it does prove to be a systematic characteristic of States that do not suffer from this, or that suffer less.

## Summary of the links between press freedom and the legal environment

The legal framework and the rule of law are changeable by their very nature. The press plays a role in this evolution by highlighting not only shortcomings and the progress that needs to be made, but the successes achieved as well. The conclusion must be that press freedom does not solve all the problems a society might face in matters of law or corruption. Nonetheless, it does seem that all societies (except Singapore, **box 6**) which have surmounted these difficulties have a free press. Two reasons can be found for this: the role played by the press in increasing transparency in the legal system and the world of business, and the protection the legal system gives journalists. The interaction between governance and press freedom comes out particularly clearly when these correlations are examined.

Thus, this last set of regressions confirms that a free press is naturally found alongside a good legal system and a low level of corruption. The press can play a powerful role in re-establishing public order and justice, but to do this it must have the courage of its convictions and the constraints on journalists must not weigh too heavily. How can anyone expose corruption or the shortcomings of the legal system – expose, that is, the behaviour of people operating within the system – if they are threatened and fear violent attack whenever they write anything that they feel, correctly, to be free? The legal system therefore needs to protect journalists so

that the press can be free to write and make appropriate criticisms when people in a society behave unacceptably.

## Box 6

### Singapore

The peculiarity of the State of Singapore is that it combines high-quality governance (according to World Bank indicators) with a press freedom indicator above 60 (non-free press) from 1996 to 2004. Censorship is strongly applied and, according to Freedom House, journalists are at such risk of persecution that they cannot report on corruption or nepotism.\* Furthermore, the media are essentially controlled by the government or by actors close to the party in power. Conversely, the World Bank indicators reveal an extremely high level of governance in the country. This paradox deserves closer analysis. Can the Singaporean exception be used to justify a form of development in which press freedom is lacking?

The Singaporean model of development combines a great concentration of power in the hands of one party, the People's Action Party, which has dominated the country's politics since independence, with a very high degree of economic openness. The economy is based mainly on banking and financial services, trade, shipping, tourism, the electronics industry, naval dockyards and refining. The country's economic development has thus been based on openness to trade and the burgeoning of advanced services. Another characteristic of Singapore is its small size, with just over 4.5 million people living on 692.7 square kilometres of land. This is thus a small, very open and heavily populated territory with economic and political characteristics closer to those of a large international city than a State in the traditional sense of the term.

Singapore is thus more of an exception that proves the rule than a model to be reproduced or followed by other States. The country has in fact achieved high-quality governance in all the areas covered by the indicators (except "Voice and accountability", which includes press freedom, however, and so cannot be considered here): no other country has pulled off this combination, which confirms yet again the singularity of Singapore. This singularity requires further study, but it does not invalidate findings that clearly establish the positive correlation between press freedom and governance in all other countries.

\* Freedom House, Country Report: Singapore, 2005, <http://www.freedomhouse.org/template.cfm?page=16&year=2005&country=6829>.

## Summary of the links between press freedom and governance

Three main arguments have traditionally been used to justify the importance attached to press freedom in the proper functioning and governance of a State. Press freedom:

- tends to expand participation in the political decision-making process beyond a small inner circle, extending it to the whole population;
- provides access to a whole variety of different ideas, opinions and information;
- makes governments more accountable to the population and allows policy implementation and the practices of those in power (such as corruption) to be monitored.

These three arguments coincide with the analysis carried out here: good governance needs a free press to be effective. Corruption will thus be better combated if it is exposed by the press than if it is disregarded. Similarly, the rule of law will be better upheld and there will be better oversight of State representatives if the press can report on abuses of power or the use of public authority for personal ends.

The results obtained here consequently confirm the hypotheses put forward at the outset. They show that, whichever indicator is used, a country cannot have good governance (essential for long-term economic development) if it muzzles its press. Other than Singapore, no State combines a low level of press freedom with high-quality governance for all the indicators studied. Governments cannot be held politically accountable and citizens cannot enjoy wide-ranging civic and political rights unless there is a free press; without it, oversight and criticism of abuses will not be possible or even thinkable. Likewise, a free press fosters the democratic process of alternation in power and thus political stability by allowing criticism and a diversity of opinion to be expressed within the law. A free press does not destabilize a system, therefore, but actually helps to regulate a country's institutions. Press freedom and good governance are significantly and positively correlated: they support each other, while fostering a country's economic and human development (table 15).



**Table 15. Estimation of coefficients by the ordinary least squares method**

	Equation 2 Political stability	Equation 3 Regulatory quality	Equation 4 Government effectiveness	Equation 5 Rule of law	Equation 6 Public expenditure on education
Press freedom	- 0,027	- 0,028	- 0,025	- 0,026	- 0,025
Standard deviation	0,002	0,002	0,002	0,002	0,002
Student <i>t</i> statistic	<b>- 13,209</b>	<b>- 13,927</b>	<b>- 10,944</b>	<b>- 12,841</b>	<b>- 11,678</b>
p	<b>0,000</b>	<b>0,000</b>	<b>0,000</b>	<b>0,000</b>	<b>0,000</b>
R <sup>2</sup>	0,476	0,508	0,384	0,462	0,420

Significant results are in bold.

43 See, in particular, D. Kaufmann, A. Kraay and M. Mastruzzi (2005). This study summarizes recent analyses of the links between governance and economic development, and its authors argue that improving governance by one standard deviation multiplies income two- or threefold in the long term.

44 D. Kaufmann, A. Kraay and M. Mastruzzi (2005).

45 *Ibid.*

46 See R. Ahrend (2002), among others.

# Press freedom and Press freedom and violence violence

**T**his final chapter will concentrate on situations deemed abnormal within the frame of reference chosen for this study. Countries where conflicts are raging and violence permeates everyday life cannot provide their populations with a framework of personal security conducive to the development of their freedoms. In such countries, the State frequently fails to uphold human rights and freedom of speech. For while freedom of speech and of the press are rights enshrined in the 1948 Universal Declaration of Human Rights, it is States first and foremost that protect (or fail to protect) these rights by legislating and bringing influence to bear on the media. As shown earlier, States that uphold human rights do not usually take repressive measures against the media to constrain freedom of speech.

First to be analysed will be the institutional aspect of insecurity, namely indicators of State militarization (military expenditure and military personnel). This will be followed by an examination of indicators of violence centring more directly on the individual (murder, rape or other types of crime that contribute to everyday insecurity). Not all the aspects referred to could be studied, owing to a lack of data; for while data do exist for all of them, they come mainly from national databases,<sup>48</sup> short-term studies or international comparisons containing little in the way of observations that are usable for econometric purposes.<sup>49</sup> The fact is that databases on crime, and on violence in general, are available principally in developed, democratic countries; elsewhere, these statistics are poorly collected or all but non-existent.

The decision was therefore taken to consider only those indicators that are available for the majority of countries. Otherwise, the conclusions from the linear

correlations studied could not be considered valid or at least admissible for all the countries included in this study. This part ends with an analysis of the effects of press freedom on violence and security, using the indicators shown in **table 16**.

**Table 16. Indicators used to analyse the links between press freedom and personal security**

	Variable	Source
Press freedom	Press freedom	Freedom House
Militarization	Military expenditure (% GDP)	World Bank, World Development Indicators
	Military personnel (% active population)	World Bank, World Development Indicators
Arms trade	Arms imports (constant 1990 US dollars)	World Bank, World Development Indicators
	Arms exports (constant 1990 US dollars)	World Bank, World Development Indicators
Refugees	Refugees by country of origin (thousands)	United Nations High Commission for Refugees
Unnatural deaths	Deaths caused by war (% of all deaths)	WHO
	Deaths caused by violence (% of all deaths)	WHO
	Suicides (% of all deaths)	WHO
	Road deaths (% of all deaths)	WHO

## Press freedom and the degree of State militarization

The purpose of this first section is to test the following hypothesis: in a State where military expenditure is very high and the armed forces exceptionally large, freedom of speech and of the press is liable to be suppressed. The hypothesis put forward is therefore that militarization of the State and freedom of the press do not develop in tandem.

## Press freedom and military expenditur

### Facts

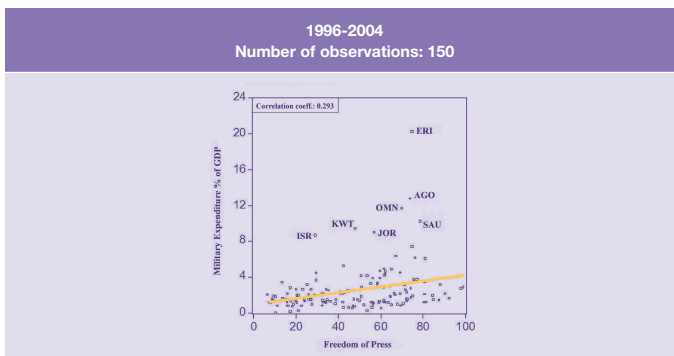
Heavily militarized States are often authoritarian, with rulers seeking to keep their regime in power through force and intimidation to the detriment of decent living conditions for citizens. In these circumstances, a vicious circle arises: there is no independent press because freedoms are repressed; with no independent press, citizens have no access to the information they need to improve their living conditions, join in the public debate and potentially contribute to the democratization of the State.

Indicators of State militarization identify the Middle East as the world's most heavily militarized region.<sup>50</sup> Most of its countries are high in the Freedom House scale, meaning that they are among those with the least press freedom.

### Interpretation

The regression obtained is statistically significant and confirms that there is a positive correlation between the press freedom indicator and military expenditure (figure 23). This correlation is not strong (coefficient of 0.293), but it is enough to show that the higher spending is (above 5% of GDP), the more a country's press freedom is curtailed (indicator above 50).

**Figure 23. Military expenditure and press freedom**



The Middle Eastern countries, Eritrea and Angola are set apart from the mass of countries by the size of their investment in the military sector. This high spending is undoubtedly explained by their history of warfare but also by the geopolitical situation of the Middle East, where relations between neighbouring countries remain strained. One exception should be noted: Israel invests a great deal in its armed forces but its press is relatively free (average score of 29.2). This exception is not unexpected, as Israel is a democracy whose press reflects a diversity of views, but it is also a country that wishes to maintain a strong military in the face of ongoing conflict and terrorism. Military service is compulsory for the entire population and lasts from one to three years, with spending in proportion.

At the same time, many countries fall below the regression line (little press freedom but military expenditure comparable to that of countries with good press freedom). These are mainly countries with large paramilitary groups, such as the Democratic Republic of the Congo (press freedom: 84.8; military expenditure of 1.55% of GDP), Tajikistan (press freedom: 87.4; military expenditure: 1.46%) and Chad (press freedom: 72.4; military expenditure: 1.37%). They are not true exceptions to the rule because the difference between the military expenditure of the State and the actual degree of militarization is large (the role of arms trafficking obviously does not show up in the data). North Korea (press freedom: 98.9; military expenditure: 2.95%) and Myanmar (press freedom: 97.7; military expenditure: 2.73%) are also below the line, but these are very closed societies whose official figures cannot be verified.

As regards military spending in Western countries, it is relatively moderate: 2.7% of GDP in France (press freedom: 23.2) and 3.4% in the United States (press freedom: 13.6). These figures do not fully reflect the true situation since much military equipment is not classified as such in the statistics.

## Points to remember

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The correlation between press freedom and military expenditure is limited but positive. This confirms, then, that countries where war is not a primary objective are also those that can have a free press. Nonetheless, since the figures available do not always reflect the true situation and the coefficient of determination ( $R$ ) of the regression is not very high, a possible conclusion is that press freedom can only be

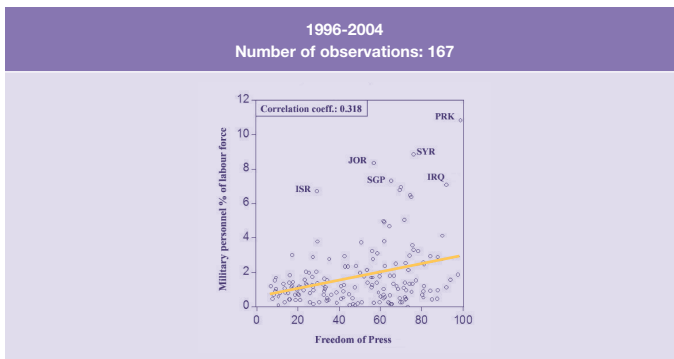
associated with a low level of State militarization (although this is not a statistically robust conclusion).

## Press freedom and military personnel

### Facts

This regression deals with the relationship between press freedom and military personnel as a proportion of the country's entire active population. The hypothesis tested is that employing a large part of the population for military purposes does not suggest a climate conducive to lasting peace. The threat of conflict must surely weigh on people, preventing them from devoting themselves wholly to the satisfaction of their needs. In such countries, the population is generally not free from other constraints either, and the press will be no exception (**figure 24**).

**Figure 24. Military personnel and press freedom**



### Interpretation

The more military personnel there are in a country, the less press freedom there is. That said, there are many countries that combine poor press freedom with a percentage of military personnel that is around average. Israel is also an exception in this category; other countries with very large contingents under arms (over 5%

of the active population) all have a low level of press freedom (indicator value above 60). North Korea is the most extreme case, with 10.8% of the active population under arms and a very low level of press freedom (98.8). The countries of the Middle East, where the situation is unstable, combine a low level of press freedom with large armed forces.

### Points to remember

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As noted earlier, data on military personnel need to be used and interpreted with care, since they are official figures that do not include paramilitary forces or secret services; if these were factored in, the tallies of several countries would soar. By way of example, the percentage given for the Democratic Republic of the Congo is 0.42%, suggesting a country with low militarization, but paramilitary groups and militias are not taken into account, and this masks the true level of military involvement in the country.<sup>51</sup> Nonetheless, this regression does confirm that a free press goes with a low proportion of military personnel in the economically active population.

## Summary of the links between press freedom and militarization

The above correlations all coincide in showing a positive relationship between State militarization and constraints on press freedom. A country that places its human and financial resources in the military domain is denying them to other areas that might have contributed to the development of individual freedoms.

This study has not reproduced an analysis that was conducted on the correlations between press freedom and arms imports and between press freedom and arms exports. These regressions were not significant, despite at first looking likely to be. In fact, other variables would have had to be taken into account to test the link between arms imports and exports and press freedom: the data on this trade are probably distorted by “private” and secret shipments. Even when the variables are converted into logarithms, the regressions remain unrevealing and the dispersion of the data does not change. Over the longer term, it might be more relevant for this type of study to make the comparison with figures like those for

arms imports/total imports or arms imports per capita/GDP per capita, in order to take the economic weight and wealth of each country into account. Ultimately, no conclusion could be drawn from these correlations, which also shows how delicate an issue this is. Besides, the arms trade generally comes in for a bad press.

In summary, it would seem that the relationship between press freedom and militarization cannot be explored without having more detailed information and data available. The results obtained are significant, but no very robust conclusions can be reached about the correlations.

## Press freedom, (in)security and violence

This section will now deal with the aspects of security and violence that affect the actual physical safety of individuals. Generally speaking, in a State where public discussion exists and the media can deal freely with the problems of society, large-scale violence is not tolerated. Conversely, a society where violence is common and the crime level is high is also a society where journalists are liable to be in danger, and the quality of the press reflects these difficult working conditions. Insecurity in daily life and strong individual freedoms, including freedom of speech and most particularly freedom of the press, thus seem to be mutually exclusive. What are concentrated on here, therefore, are the links between press freedom and statistics on the number of refugees per country and death from unnatural causes. The second hypothesis being tested now is that a State which is incapable of protecting its citizens against State or non-State violence is often also a State where there is little press freedom.



## Press freedom and refugees by country of origin

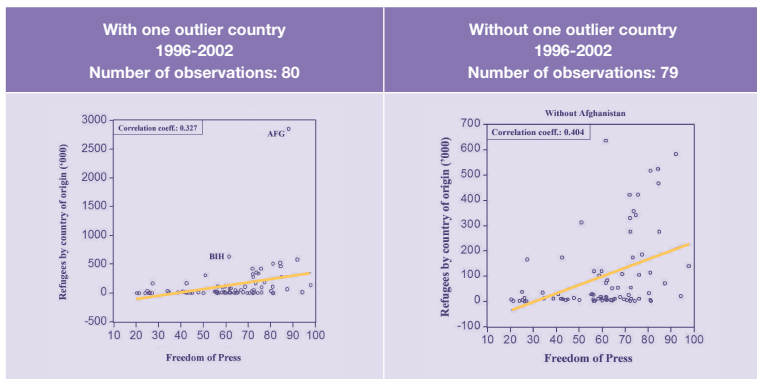
### Facts

Leaving one's country to become a refugee abroad is the ultimate evidence of insecurity. If it is difficult to find refuge in one's country of origin, it is extremely unlikely that there will be much freedom of speech there.

### Interpretation

Data from the United Nations High Commission for Refugees and Freedom House bear out this supposition: when there are large numbers of refugees from a particular country, the chances are that there is little press freedom in that country (figure 25). The findings are significant and the correlation coefficient is 0.327: a good level of press freedom in a country is thus associated with a low number of refugees from that country.

**Figure 25. Refugees by country of origin and press freedom**



Afghanistan is in the top right-hand corner of the left-hand chart (**figure 25**): it exemplifies an extreme situation, with almost three million refugees a year over the 1996-2002 period and a press that does not operate freely (average score of 88). When this outlier country is removed from the regression, the results are upheld: the

correlation coefficient is then 0.404, confirming the links between a lack of press freedom and a situation of acute insecurity for individuals in a country

### Points to remember

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The number of Afghan refugees is explained, of course, by the country's extremely precarious living conditions: physical safety cannot be guaranteed because the State does not have a monopoly of power and is not in control of violence. Under these conditions, the rule of law does not operate and consequently there is no security for economic activity and opportunities for social advancement are almost nil. Afghans do not enjoy full political rights and lack adequate access to health or education services. In these circumstances, there is only one option left: to look elsewhere for security and human dignity.

It would be worth carrying out this regression only for countries whose inhabitants are fleeing. As **figure 25** shows, many countries do not generate flows of refugees because they are not generally in a war situation and do not use violence (psychological or physical) against their citizens. It would thus be interesting to learn the value of the correlation coefficient exclusively for those countries affected by the issue. The findings would probably be far more striking.

## Press freedom and homicide

This subsection concerns itself with cases of unnatural death. The indicators used are WHO statistical estimates covering all causes of death, natural or otherwise. This part contains the variables for mortality from war and violence (murder and manslaughter).

### War

#### Facts

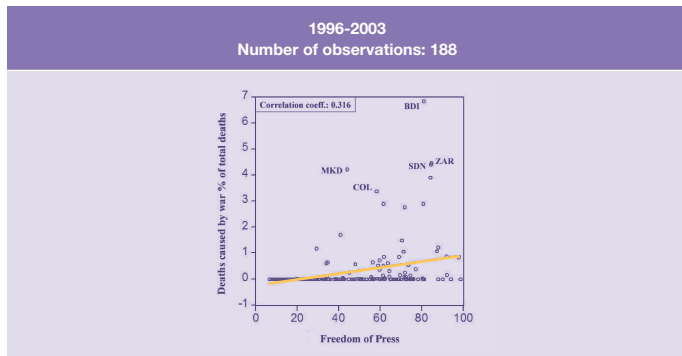
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The hypothesis put forward here seems obvious: press freedom is non-existent or very limited in countries that are in a state of conflict, be this ethnic, inter-State, civil war or other.

## Interpretation

The results are statistically significant (figure 26). Most of the countries considered were not at war in the period studied; the number of conflict deaths in them was therefore zero, and they are lined up on their press freedom score. Most of the countries in conflict situations have a press freedom score of over 60 and are grouped on the right-hand side of the chart, confirming the initial hypothesis. One exception to this rule is the former Yugoslav Republic of Macedonia: although its press is described as “partly free” (44.2), it is the only European country to show a high percentage of deaths from warfare (4.23%). It is hard to account for this exception, for while the level of press freedom remained almost unchanged after the instability experienced by the region in the late 1990s and the 2001 war, it has deteriorated very recently.<sup>53</sup> Thus, the average indicator value cannot be said to be masking large swings which might have explained the country’s situation. In Colombia, guerrilla warfare is causing a large number of deaths, raising the conflict mortality rate; with an index value of 58.2 points, the country’s press is close to qualifying as non-free.<sup>54</sup>

Figure 26. Deaths caused by war, and press freedom



## Points to remember

In countries at war, then, press freedom is extremely limited. Here again, it would be interesting to rework the study for countries where the number of deaths

is zero. The coefficient obtained would probably be much higher, of the same order as might be produced by taking the number of refugees.

The cases of Burundi, Sudan and the Democratic Republic of the Congo, lastly, remind us that States faced with conflict cannot really be helped by press freedom. If it existed before the conflict, it may help in the search for a peaceful solution. In a country where it is heavily restricted, however, there is a good chance of its disappearing altogether before any peaceful solution can be reached. This finding is unfortunate but simply undeniable.

## Murder and manslaughter

### Facts

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Countries where violence is part of everyday life are unlikely to have a good level of human development. Guerrilla warfare, organized crime, rape and so on are not conducive to normal personal development.

### Interpretation

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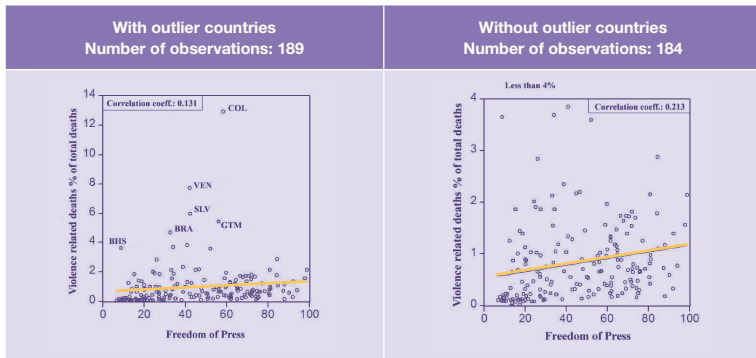
At first sight, and contrary to expectations, the correlation between the percentage of deaths caused by different kinds of violence and press freedom is very weak (0.131) (**figure 27**). On the face of it the two variables are thus independent, but because the statistics are not very significant this relationship is verified by producing a second regression that excludes the outlier countries in the left-hand chart.

The countries of Latin America combine exceptionally high murder rates with intermediate scores for press freedom. This obviously has a great deal to do with the presence of numerous small armed groups in these countries.<sup>55</sup> The most striking example is Colombia, where 12.9% of all deaths are violent. This is also a country with a low level of press freedom (average score of 58.2 for 1996-2004, and now higher still at 63).<sup>56</sup>

When the regression is repeated without the five countries of Latin America that have the highest percentages of homicides, the correlation becomes significant: the correlation coefficient is 0.213 and the Student *t* statistic is 2.94. Press freedom does therefore seem to have some slight effect on the number of violent deaths.

Given the apparent dispersion on the right-hand chart, however, there is a case for more research into the different sorts of crime encompassed by these figures: some countries with a high level of press freedom have at least as many violent deaths as others with no press freedom.

**Figure 27. Violence-related deaths and press freedom**



### Points to remember

It is thus difficult to reach any firm conclusion about the links between press freedom and deaths from criminal violence. The countries of Latin America seem to form a group apart in which urban guerrilla warfare is perhaps more pervasive than elsewhere. There is a need to examine these figures in greater detail or study the links between violent deaths and countries' urbanization levels, the state of their infrastructure and the concentration of the poor population in cities. As things stand, the conclusions are not very robust.

### Summary of the links between press freedom and homicide levels

The correlations observed are generally significant and positive but weak. The difficulties encountered can be explained by problems with the figures and the complexity of the relationships involved. Regressions were carried out between press freedom and suicide rates, but no conclusion emerged. Suicides take place whether or not the press is free and their number seems to be determined by other variables.

Following Durkheim's thesis, it might be argued that the number of suicides in economically and politically advanced societies, which are often more individualistic than others, is indicative of the degree to which social solidarity has been lost. But in that case, how can rates in less developed countries be accounted for? Once again, a more thorough examination of the causes of suicide is needed: these might be looked for in unemployment in developed countries, and in conditions of extreme deprivation and insecurity in developing ones. Press freedom must be playing a relatively minor role here. Regressions were also carried out between press freedom and road deaths, but the results are not very compelling in this case either.

Thus, a more detailed examination of the situations and indicators used is needed as a firmer basis for conclusions. Another approach could be to use variables other than press freedom to account for each indicator employed and thereby establish the underlying logic and the avenues through which the press might ultimately exert some influence.

## Summary of the links between press freedom and violence

Taken together, the regressions considered in this section show that it is difficult to evaluate the real links between press freedom and the different measurements of the violence suffered by the population. In militarized States where people live in a situation of armed conflict or under the threat of military attack, press freedom is often limited. The same cannot be said so confidently, however, about States where violence is highly prevalent, as levels of press freedom in these countries differ. The degree of State militarization as measured by military expenditure and personnel yields some interesting results, but we cannot attach too much weight to them since paramilitary activity is not reflected in official figures. In a different approach centring more on the individual, the number of refugees and the homicide rate were taken as variables that revealed the degree of insecurity in a society. Press freedom is certainly very weak in countries that are highly insecure. Conversely, pervasive threats or violence in daily life are less of a problem in

countries where the media function properly. Nonetheless, as the high murder rates in the countries of Latin America illustrate, some problems are peculiar to particular societies and cannot be explained by a general model.

Accurate data on violence and crime are hard to come by and no very detailed figures can be obtained, which is another reason for the lack of robust conclusions in this area. More information is available for developed countries at peace than for countries where there is a great deal of violence. Even when information is available, it is restricted (controlled by police forces) and a full picture is hard to obtain. Consequently, regressions may be distorted.

Lastly, the results obtained do not establish a link of causality in one direction or the other. Even if there actually is a correlation between press freedom and most indicators of security and violence, this is a fairly weak link that requires more detailed study with better data. However, there is nothing to contradict the conclusion that press freedom is conducive to greater security and that the press can operate more freely when security conditions are good (**table 17**).

**Table 17. Estimation of coefficients by the ordinary least squares method**

	Equation 1 Military expenditure	Equation 2 Military personnel	Equation 4 Refugees by country of origin	Equation 5 Deaths caused by war	Equation 6 Deaths caused by violence	Équation 11 Réfugiés < 2 millions	Équation 12 Décès dus à la violence < 4 %
Observations	150	167	80	188	189	79	184
Press freedom	0,032	0,024	6,00	0,012	0,007	3,40	0,0064
Student <i>t</i> statistic	<b>3,73</b>	<b>4,31</b>	<b>3,06</b>	<b>4,53</b>	<b>1,81</b>	<b>3,88</b>	<b>2,94</b>
p	<b>0,000</b>	<b>0,000</b>	<b>0,003</b>	<b>0,000</b>	<b>0,073</b>	<b>0,000</b>	<b>0,004</b>
R <sup>2</sup>	0,086	0,101	0,107	0,100	<i>0,017</i>	0,163	0,045

Significant results are in bold and non-significant ones in bold italic, while italics denote a very weak coefficient.

- 47 Article 19: "Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers."
- 48 For example, the FBI Uniform Crime Reporting Program, which has collected statistics on crime in the United States since 1930.
- 49 The Human Security Report published by the Human Security Centre is one example: this is an annual report, which means that the comparative tables seldom contain multi-year data, and only a selection of countries is studied on each occasion.
- 50 See the study by A. H. Cordesman (1998).
- 51 See the International Crisis Group reports on the country, which are available online ([www.crisisgroup.org](http://www.crisisgroup.org)).
- 52 S. Tadjbakhsh (2005a).
- 53 Freedom House score for press freedom in the former Yugoslav Republic of Macedonia: 36 in 1996, 44 in 1998, 42 in 2000, 46 in 2002 and 53 in 2004.
- 54 Under the Freedom House classification, a score of 61 to 100 indicates that the press is not free.
- 55 See C. Ribando (2006).
- 56 According to the latest Freedom House ranking in 2005.
- 57 Émile Durkheim, Suicide, 1897.
- 58 In theory, for example, Interpol only shares its databases with police authorities.



# Conclusion, appreciations and recommendations

## Conclusion, appreciations and recommendations

### Overview of the approach used

The analytical approach of this study is based on a broad theory of development that includes the ideas of governance and security. According to this approach, individuals need to be free of want of all kinds (survival is a precondition for living, and living properly for living better) before they can enjoy their freedom. This study has detailed at length all the links (or all those of which econometric use can be made) between press freedom and different indicators of development. The approach followed was to group these indicators into five categories, further subdivided into three sections, with a view to addressing the essential aspects of development (as also given by the MDGs).

There are sound theoretical reasons for thinking that press freedom contributes significantly to the dynamism of development. As the President of the United Republic of Tanzania, Banjami Mkapa, has pointed out, development cannot be imposed; it can only be facilitated,<sup>59</sup> and by carrying out its role as “guardian”, coordinator and promoter of democracy, the press has a positive influence on the different dimensions of development. Failure in any one of these functions reduces

its contribution to the development process. Thus, its effectiveness depends on its independence, quality and reach.

These theoretical considerations aside, the present study, which is based on an empirical analysis, suggests that there is a “good” correlation between press freedom and the different dimensions of development, poverty and governance. Its findings bear out the theory quite well and can be summarized as follows.

Firstly, press freedom is strongly associated with both the degree of development and the level of poverty in a country. Unmet material needs, deficiencies in health care and educational deficits are all positively correlated with press freedom:

- a very robust link exists between per capita GDP and press freedom, even when GDP defines not just the income level of the community as a whole but that of individuals too. The correlation is much clearer for the population living below the \$2 a day poverty line than for those living below \$1 a day. It would be too much to say, however, that press freedom is unrelated to extreme poverty. The correlations with rates for undernutrition and access to safe water prove that press freedom does influence the satisfaction of people’s basic needs;
- the press can play a part in improving health conditions. In countries where there is no press freedom, the share of GDP spent on health is low. Shortages of health personnel in numerous developing countries, especially in Africa, are a problem the press should give more attention to in an effort to improve the situation;
- press freedom is positively correlated with education. Countries where press freedom exists have high rates of primary and secondary enrolment. Paradoxically, there is no linear relationship between public education spending and press freedom. Education has a positive influence on press freedom, and its impact is substantial. An educated, more independent population will be better placed to demand greater press freedom.

Secondly, press freedom is positively correlated with governance. Countries that do not have it suffer from governance problems. Individuals in positions of

power may tend to neglect the system they helped to build, and the press can provide a useful reminder. But this also implies that there should be no abuse of power and that the system created by individuals should not turn against them by constraining their freedom and consequently that of the press. The three basic suppositions were as follows:

- press freedom tends to expand participation in the political decision-making process beyond a small inner circle, extending it to the whole population;
- press freedom provides access to a whole variety of different ideas, opinions and information;
- press freedom makes governments more accountable to the population and allows policy implementation and the practices of those in power (corruption, for example) to be monitored.

These three arguments have thus been confirmed: a free press is needed for good governance to be effective. Thus, corruption will be better combated if it is exposed by the press than if it is connived at. Similarly, the rule of law will be better upheld and there will be better oversight of State representatives if the press can report on abuses of power or the use of public authority for personal ends.

Thirdly, press freedom is positively correlated with a low level of military expenditure and military personnel. The link between press freedom and violence or security is very weak. A lack of usable numeric data means that no very robust conclusions can be reached about the links between press freedom and personal security.

## Interpreting the conclusions

These conclusions can be interpreted in a number of ways. First of all, a free press can be said to influence human development via three mechanisms:

- it acts as an intermediary between individuals and government by apprising the latter of the needs of the population and acting as a bulwark against crises and situations of extreme deprivation. This bears out Amartya Sen's theory;
- it makes governments accountable and their actions more transparent;
- it is important not only for anti-poverty efforts but also for economic development in the broad sense of the term. Along with other indicators of good governance, it creates an environment favourable to business, more effective conduct of public affairs, and so on.

These results thus suggest that a free press can contribute to attainment of the MDGs and, most importantly, can help ensure that the different dimensions of human and societal development are satisfied. By upholding press freedom, States and international organizations give themselves a powerful lever of development. An important finding may be recalled here: no country has both a free press and a very large percentage of its population living below the poverty line. A traditional argument against a free press in poor countries is that it is a "luxury". But as James D. Wolfenson puts it: "To reduce poverty, we must liberate access to information and improve the quality of information. People with more information are empowered to make better choices [...] A free press is not a luxury. It is at the core of equitable development."<sup>60</sup> The concern of this study, however, is to provide an overview of development. Press freedom is systematically associated with high-quality governance, itself a factor in development. This finding strongly increases the possibility of a link between poverty and press freedom. Furthermore, it reinforces the credibility of the argument that press freedom is an instrument of development in itself, just like education or investment.

Lastly, we must never forget that the individual is at the centre of this analysis: press freedom is just one reflection of another set of freedoms that people can enjoy in the common life of society. Freedom for some is often thwarted because others abuse this freedom, forgetting how hard it is to obtain. Must it also be pointed out that the effectiveness of the media is determined by their independence, quality and reach? "More democratic countries also have a freer press, but do free media promote greater democracy or does a functioning democracy promote free media?"

Undoubtedly the effect can work both ways, and there are degrees of media freedom and democracy.<sup>61</sup> Democracy aside, media freedom varies depending on the subject matter: economic information may be censored more than political information. Furthermore, given comparable levels of democracy, “richer countries seem to value information more”. Thus, the importance attached to freedom of information will itself vary depending on the level of human development attained.

## Suggestions for further work

As has been pointed out on numerous occasions, demonstrating a correlation between press freedom and development does not settle the important question of causality.<sup>62</sup> It is now clear that press freedom and development interact and that the one is not found without the other. This finding is a step forward in itself: it shows the limitations of a development process in which free media are not allowed to exist. There is a need, though, to scrutinize the causal link between the two concepts, for example by identifying control indicators: there is nothing automatic about any relationship of cause and effect (for example, raising education levels is not always enough to improve press freedom; similarly, a freer press does not always increase access to education). It is necessary to envisage the other variables that might be involved (economic and health security, but also the political regime in place) and regard the combination as a system in which all the variables interact. The main purpose of a more simplified approach with just the two variables is to give an idea of the direction of the relationship (positive in this case) and its level of significance. Evaluating the impact is ultimately a secondary matter and is very difficult.

This study also comes up against some limitations that are inevitable given the very large number of indicators the authors chose to test. Where security is concerned, for example, it is difficult to interpret the results and draw conclusions. With education, again, the direction of the relationship is a very moot question and should likewise be the subject of further investigation. Furthermore, indicators of media penetration were not considered in the correlations in the way they are by Pippa Norris in her study. That said, the coefficients obtained do not differ greatly

from those she gives (see annex). It would be worth doing further work to identify other ways of looking at the relationship between press freedom and better human security. Targeting indicators that reflected the individual perspective more would also yield very interesting results.

More generally, this study opens the way to all sorts of further investigations, some of which can be touched upon:

- reinforce the initial conclusions by controlling the regressions more widely and extending the econometric work;
- look more closely at relationships that are not well-established, both theoretically and empirically;
- devote studies to “special cases” such as Singapore and Cuba;
- examine the links between gender equality and press freedom; these have not been addressed in this study, but they merit a great deal of attention. This would mean finding good indicators, among other things.

In addition, the decision to study the indicators by taking multi-year averages is open to question. A longer study could establish correlations year by year and see how they develop, identify countries where the problems are structural, see if transition countries have progressed, and assess developments in post-conflict countries.

Lastly, there needs to be more examination of the causal link between press freedom and each of the stages of development (the idea of the needs pyramid). The human security threshold approach is still somewhat tentative and studies of this kind, using indicators closer to the actual concept of human security, would allow it to be defined more precisely: when the correlation coefficients between press freedom and each of the development indicators are examined, it transpires that the influence of the press is always more or less “good” for the indicators, meaning that it brings greater security for individuals in their everyday lives. In most cases, good indicator values are found where there is a free press. The question, then, is whether the press influences human development more than human development influences the press: the puzzle of causality is always there in the background. One theory would be that certain elements are definitely required for the press to develop

(education, infrastructure) and others then become necessary for real press freedom (laws, rights and protection for journalists). It can only acquire this freedom, however, by showing independence, when individuals realize what an important resource it is. So the question might be whether the press does not in fact only start to be truly free when the last two thresholds are crossed to create appropriate conditions of human security, when individuals' primary and secondary needs have been partly met, when people have become "stronger" and can more easily take advantage of their freedom of speech without fearing or feeling oppressed by their fellows. In such "transition" societies, the role of the press is truly beneficial and is a force for greater human dignity. But does this issue of causality still apply in developed countries? And in the poorest countries, where living conditions are harshest, is it possible to find a logical direction of influence, prerequisites for improvement? Be this as it may, the ground rules need to be tested unceasingly to find out whether they operate for everyone. The press, like human beings generally, needs to release itself from the constraints that beset its existence if it is to gain its freedom.



59. "Development cannot be imposed. It can only be facilitated. It requires ownership, participation and empowerment, not harangues and dictates" (IUCN, 2005).
- 60 See the foreword to *The Right to Tell: The Role of Mass Media in Economic Development* (World Bank, 2002).
- 61 J. Stiglitz, in *World Bank* (2002).
- 62 One possible approach would have been to adopt a conceptual framework whereby the ending of autocratic control and the liberalization of the press, taking place in an initial stage, pave the way to firmer democracy and the introduction of good governance, reinforced by the roles of the press (safeguard, civic forum and task-setter), after which human development can progress (see P. Norris, 2002). This, however, does not take sufficient account of the interactions between each of the aspects of development identified in this study. What is it, for example, that causes autocratic control to end? It has been shown that some societies under authoritarian regimes have had fairly good levels of development without press freedom.



# Annexes

## Annexes

### Country codes (ISO 3, World Bank)

Code	Country
ABW	Aruba
ADO	Andorra
AFG	Afghanistan
AGO	Angola
AIA	Anguilla
ALB	Albania
ANT	Netherlands Antilles
ARE	United Arab Emirates
ARG	Argentina
ARM	Armenia
ASM	Samoa
ATG	Antigua and Barbuda
AUS	Australia
AUT	Austria
AZE	Azerbaijan
BDI	Burundi
BEL	Belgium
BEN	Benin
BFA	Burkina Faso
BGD	Bangladesh
BGR	Bulgaria
BHR	Bahrain
BHS	Bahamas
BIH	Bosnia and Herzegovina
BLR	Belarus
BLZ	Belize
BMU	Bermuda

Code	Country
BOL	Bolivia
BRA	Brazil
BRB	Barbados
BRN	Brunei Darussalam
BTN	Bhutan
BWA	Botswana
CAF	Central African Republic
CAN	Canada
CH	Suitzerland
CHL	Chili
CHN	China
CIV	Côte d'Ivoire
CMR	Cameroon
COG	Congo
COK	Cook Islands
COL	Colombia
COM	Comoros
CPV	Cape Verde
CRI	Costa Rica
CUB	Cuba
CYM	Cayman Islands
CYP	Cyprus
CZE	Czech Republic
DEU	Germany
DJI	Djibouti
DMA	Dominica
DNK	Denmark

Code	Country
DOM	Dominican Republic
DZA	Algeria
ECU	Equator
EGY	Egypt
ERI	Eritrea
ESP	Spain
EST	Estonia
ETH	Ethiopia
FIN	Finland
FJI	Fiji
FRA	France
FSM	Micronesia
GAB	Gabon
GBR	United Kingdom
GEO	Georgia
GHA	Ghana
GIN	Guinea
GMB	Gambia
GNB	Guinea-Bissau
GNQ	Equatorial Guinea
GRC	Greece
GRD	Grenada
GTM	Guatemala
GUF	Guyana
GUM	Guam
GUY	Guyana
HKG	Hong Kong
HND	Honduras
HRV	Croatia
HTI	Haiti
HUN	Hungary
IDN	Indonesia
IND	India
IRL	Ireland
IRN	Islamic Republic of Iran
IRQ	Iraq
ISL	Iceland
ISR	Israel
ITA	Italy
JAM	Jamaica
JOR	Jordan
JPN	Japan
KAZ	Kazakhstan

Code	Country
KEN	Kenya
KGZ	Kyrgyzstan
KHM	Cambodia
KIR	Kiribati
KNA	Saint Kitts and Nevis
KOR	Republic of Korea
KWT	Kuwait
LAO	Lao People's Democratic Republic
LBN	Lebanon
LBR	Liberia
LYB	Libyan Arab Jamahiriya
LCA	Saint Lucia
LIE	Liechtenstein
LKA	Sri Lanka
LSO	Lesotho
LTU	Lituania
LUX	Luxembourg
LVA	Latvia
MAC	Macao, China
MAR	Morocco
MCO	Monaco
MDA	Republic of Moldova
MDG	Madagascar
MDV	Maldives
MEX	Mexique
MHL	Marshall Islands
MKD	Former Yugoslav Republic of Macedonia
MLI	Mali
MLT	Malta
MMR	Myanmar
MNG	Mongolia
MOZ	Mozambique
MRT	Mauritania
MTQ	Martinique
MUS	Mauritius
MWI	Malawi
MYS	Malaysia
NAM	Namibia
NER	Niger
NGA	Nigeria
NIC	Nicaragua
NIU	Niue

Code	Country
NLD	Netherlands
NOR	Norway
NPL	Nepal
NRU	Nauru
NZL	New Zealand
OMN	Oman
PAK	Pakistan
PAN	Panama
PCI	Palau
PER	Peru
PHL	Philippines
PNG	Papua New Guinea
POL	Poland
PRI	Puerto Rico
PRK	Democratic People's Republic of Korea
PRT	Portugal
PRY	Paraguay
QAT	Qatar
REU	Réunion
ROM	Roumania
RUS	Russian Federation
RWA	Rwanda
SAM	Samoa
SAU	Saudi Arabia
SDN	Sudan
SEN	Senegal
SGP	Singapore
SLB	Solomon Islands
SLE	Sierra Leone
SLV	El Salvador
SMR	San Marino
SOM	Somalia
STP	Sao Tome and Principe
SUR	Suriname
SVK	Slovakia
SVN	Slovenia

Code	Country
SWE	Sweden
SWZ	Swaziland
SYC	Seychelles
SYR	Syria
TCD	Chad
TGO	Togo
THA	Tailand
TJK	Tajikistan
TKM	Turkmenistan
TMP	Timor-Leste
TON	Tonga
TTO	Trinidad and Tobago
TUN	Tunisia
TUR	Turkey
TUV	Tuvalu
TWN	Taiwan
TZA	Tanzania
UGA	Uganda
UKR	Ukraine
URY	Uruguay
USA	United States of America
UZB	Uzbekistan
VCT	Saint Vincent and the Grenadines
VEN	Venezuela
VIR	Virgin Islands
VNM	Viet Nam
VUT	Vanuatu
WBG	West Bank
YEM	Yemen
YUG	Serbia and Montenegro
ZAF	South Africa
ZAR	Democratic Republic of the Congo (Zaire)
ZMB	Zambia
ZWE	Zimbabwe

## Indicators used in the regressions

	Variable	Source	Years
Press freedom	Press freedom	Freedom House	1996, 1998, 2000, 2002, 2004
<b>Human development</b>			
Human poverty	Human poverty index (developing countries) HPI-1	United Nations	1996, 1998, 2000, 2002, 2004
Monetary poverty	GDP per capita in PPP (constant 2002 international dollars)	World Bank	1996, 1998, 2000, 2002, 2003
	Population living on less than 1 \$/d (%)	World Bank	1996, 1998, 2000, 2002, 2003
	Population living on less than 2 \$/d (%)	World Bank	1996, 1998, 2000, 2002, 2003
	Poverty gap indices	World Bank	1996, 1998, 2000, 2002, 2003
Inequalities	Gini index	United Nations	1996, 1998, 2000, 2002
Impact of poverty on the population	Population suffering from undernutrition (%)	World Bank	2002
	Population with access to drinking water (%)	World Bank	2002
<b>Health</b>			
Health spending	Public health expenditure (% of GDP)	World Bank	1998, 2000, 2002
	Private health expenditure (% of GDP)	World Bank	1998, 2000, 2002
Health status	Life expectancy at birth (years)	United Nations	2000, 2002, 2004, 2005
	Infant mortality rate (per 1,000 live births)	United Nations	2004
Health resources	HIV prevalence (% of people aged 15-49)	United Nations	2003
	Prevalence of contraception (%)	United Nations	2003
	Doctors (per 1,000 inhabitants)	United Nations	1996, 1998, 2000, 2002, 2003
	Births attended by skilled health personnel (%)	United Nations	1996, 1998, 2000, 2002, 2003
	One-year-olds immunized against tuberculosis (%)	United Nations	1996, 1998, 2000, 2002, 2003
	One-year-olds immunized against measles (%)	United Nations	1996, 1998, 2000, 2002, 2003

	Variable	Source	Years
<b>Education</b>			
General education index	Indice d'instruction	ISU	1998, 2000, 2002, 2003
Literacy	Taux d'alphabétisation des adultes de plus de 15 ans (%)	ISU	1996, 1998, 2000, 2002, 2003
School enrolment	Taux net de scolarisation dans le primaire (%)	ISU	1998, 2000, 2002, 2003
	Taux net de scolarisation dans le secondaire (%)	ISU	1998, 2000, 2002, 2003
Education expenditure	Dépenses publiques d'éducation (% PIB)	ISU	2000, 2002
<b>Governance</b>			
Political stability	Voice and accountability	World Bank	1996, 1998, 2000, 2002, 2004
	Political stability and absence of violence	World Bank	1996, 1998, 2000, 2002, 2004
Institutions	Government effectiveness	World Bank	1996, 1998, 2000, 2002, 2004
	Regulatory quality	World Bank	1996, 1998, 2000, 2002, 2004
Legal system	Rule of law	World Bank	1996, 1998, 2000, 2002, 2004
	Control of corruption	World Bank	1996, 1998, 2000, 2002, 2004
<b>Security and violence</b>			
Degree of State militarization	Military expenditure (% GDP)	World Bank	1996, 1998, 2000, 2002, 2004
	Military personnel (% of total workforce)	World Bank	1996, 1998, 2000, 2002, 2003
	Arms imports and exports	World Bank	1996, 1998, 2000, 2002, 2003
Insecurity and violence	Number of refugees by country of origin (thousands)	World Bank	1996, 1998, 2000, 2002
	Deaths caused by injuries	OMS	2002

## Public expenditure on health and press freedom

Country	Health expenditure (% GDP)	Press freedom
Angola	3,96	77,40
Afghanistan	6,48	96,25
Algeria	3,86	79,80
Saudi Arabia	4,38	85,40
Azerbaijan	4,14	74,00
Bahrain	4,48	72,00
Belarus	6,24	82,40
Buthan	3,86	73,80
Brunei Darussalam	3,58	74,80
Burundi	3,08	81,60
Cambodia	11,38	63,40
Cameroon	4,62	74,00
China	5,40	80,40
Congo	2,48	69,60
Côte d'Ivoire	6,24	73,00
Cuba	7,12	94,60
Djibouti	6,24	63,40
Egypt	4,98	70,60
United Arab Emirates	3,48	75,60
Eritrea	4,78	70,40
Ethiopia	5,28	62,60
Gambia	7,02	68,00
Guinea	5,44	71,20
Equatorial Guinea	2,46	80,80
Haiti	7,10	61,20
Iraq	1,60	98,40
Libyan Arab Jamahiriya	3,30	90,00
Jordan	9,08	60,40
Kazakhstan	3,82	68,20
Kenya	4,92	68,00
Kyrgyzstan	4,74	63,60
Lebanon	11,86	64,00
Liberia	3,84	70,40
Malaysia	3,40	67,60
Maldives	4,72	64,60

Country	Health expenditure (% GDP)	Press freedom
Mauritania	2,94	67,40
Myanmar	2,02	98,40
Niger	4,24	60,80
Nigeria	4,90	62,60
Oman	3,40	72,00
Uzbekistan	5,84	81,20
Qatar	3,26	62,00
Central African Republic	3,66	62,00
Democratic Republic of the Congo	3,60	86,60
Lao People's Democratic	2,88	69,80
Islamic Republic of Iran	5,90	73,80
Democratic People's Republic of Korea	4,28	99,20
Rwanda	5,42	74,80
Serbia and Montenegro	9,14	67,60
Sierra Leone	3,52	76,40
Singapore	4,02	66,80
Somalia	2,65	87,20
Sudan	4,90	85,40
Sri Lanka	3,56	63,00
Swaziland	6,32	76,20
Syria	5,20	74,00
Tajikistan	3,40	88,20
Chad	6,32	72,60
Togo	6,58	72,00
Tunisia	5,74	73,80
Turkmenistan	4,06	87,00
Turkey	6,16	62,40
Viet Nam	5,06	75,80
Yemen	4,34	67,60
Zambia	5,80	62,20
Zimbabwe	8,72	68,80

## Comparison of Pippa Norris's results with those of this study (indicators in italics were not studied by Pippa Norris)

	Freedom House press freedom indicator 1996-2004	Comparison with P. Norris's findings (2002)	
		Press freedom	Communication index
<b>HDI</b>			
Correlation coefficient	- 499	0,519	0,801
p	0,000	0,000	0,000
Number of observations	178	167	128
<b>HPI</b>			
Correlation coefficient	0,337		
p	0,002		
Number of observations	85		
<b>GDP/cap., PPP, 2002 international dollars</b>			
Correlation coefficient	- 0,645 - 0,703 (excluding outlier countries)	0,508	0,793
p	0,000	0,000	0,000
Number of observations	164 159	167	128
<b>Indice de Gini</b>			
Correlation coefficient	0,363	0,246	0,403
p	0,010	0,009	0,000
Number of observations	96	113	101
<b>People living on less than 2 \$/d</b>			
Correlation coefficient	0,393 0,490		
p	0,000		
Number of observations	71 68		
<b>Access to drinking water</b>			
Correlation coefficient	- 0,432		
p	0,000		
Number of observations	158		
<b>Life expectancy at birth</b>			
Correlation coefficient	- 0,438	0,464	0,700
p	0,000	0,000	0,000
Number of observations	171	168	128

	Freedom House press freedom indicator 1996-2004	Comparison with P. Norris's findings (2002)	
		Press freedom	Communication index
<b>Infant mortality rate</b>			
Correlation coefficient	0,623	0,405	0,670
p	0,000	0,000	0,000
Number of observations	191	142	130
<b>Public health expenditure (% GDP)</b>			
Correlation coefficient	- 0,640	0,475	0,659
p	0,000	0,000	0,000
Number of observations	183	127	128
<b>Immunization against tuberculosis</b>			
Correlation coefficient	- 0,347		
p	0,000		
Number of observations	186		
<b>Doctors (per 1,000 inhabitants)</b>			
Correlation coefficient	- 0,349		
p	0,000		
Number of observations	145		
<b>Prevalence of HIV (0.1-8 %)</b>			
Correlation coefficient	0,475		
p	0,000		
Number of observations	86		
<b>Education inde</b>			
Correlation coefficient	0,400		
p	0,000		
Number of observations	172		
<b>Adult literacy rate</b>			
Correlation coefficient	- 0,375	0,404	0,673
p	0,000	0,000	0,000
Number of observations	174	167	128
<b>Net secondary enrolment ratio</b>			
Correlation coefficient	- 0,519	0,459	0,731
p	0,000	0,000	0,000
Number of observations	147	125	101
<b>Political stability</b>			
Correlation coefficient	- 0,689	0,633	0,727
p		0,000	0,000
Number of observations		140	120
<b>Government effectiveness</b>			
Correlation coefficient	- 0,619	0,688	0,771
p		0,000	0,000
Number of observations		141	121



	Freedom House press freedom indicator 1996-2004	Comparison with P. Norris's findings (2002)	
		Press freedom	Communication index
<b>Regulatory quality</b>			
Correlation coefficient	- 0,712		
p			
Number of observations			
<b>Rule of law</b>			
Correlation coefficient	- 0,679	0,644	0,763
p		0,000	0,000
Number of observations		151	125
<b>Control of corruption</b>			
Correlation coefficient	- 0,648	0,674	0,788
p		0,000	0,000
Number of observations		140	120

Source: According to P. Norris and D. Zinnbauer (2002).

# Abbreviations and acronyms

**GDP:** gross domestic product

**GDP:** gross national product

**HDI:** human development index

**HDR:** *Human Development Report*

**HIV/AIDS:** human immunodeficiency virus/acquired immune deficiency syndrome

**HPI:** human poverty index

**HSI:** human security index

**MDGs:** Millennium Development Goals

**PPP:** purchasing power parity

**RWB:** Reporters Without Borders

**UIS:** UNESCO Institute of Statistics

**UNDP:** United Nations Development Programme

**UNU/WIDER:** United Nations University/World Institute for Development Economics Research

**WHO:** World Health Organization

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The influence of a free press on development has never been properly assessed. It is difficult, if not impossible, to calculate such impact. However, correlations between freedom of the press and the different dimensions of societies' development in the broad sense can be perceived through simple econometric regressions. While no conclusion can be reached as to the existence of causality between freedom of the press and the different variables explored, all the findings confirm the importance of press freedom for development. A free press always has a positive influence, whether it be on poverty and its different aspects (monetary poverty and access to primary commodities, health and education), on governance or on violence and conflict issues. It serves as an intermediary between individuals and government, informing the latter of people's needs and acting as a buffer against crises and situations of extreme deprivation; it holds governments accountable and makes their actions more transparent; and, along with other indicators of good governance, it creates a business-enabling environment, a climate conducive to more effective public affairs management, and so forth. The results thus suggest that a freer press can contribute to achievement of the Millennium Development Goals and, most importantly, to attainment of an acceptable and viable level of development. By promoting freedom of the press, States and international organizations provide themselves with a powerful development tool. A free press constitutes an instrument of development as such, in the same way as education or investment.

*« The links between free press and development are evident. Over the last two decades, success stories of people empowered through the free flow of ideas and by access to information and knowledge have been accompanied by many resolutions and authoritative statements by international bodies on the importance for sustainable development of an environment enabling free, pluralistic and independent media. Therefore, supporting freedom of expression has been increasingly considered as a mean to promote human development, security, participation, accountability, good governance and therefore ultimately as a way to contribute to poverty reduction... »*

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