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How to cite this publication

Please cite this version:

Bjørnskov, C. (2018). The Hayek–Friedman hypothesis on the press: Is there an association between economic freedom and press freedom? *Journal of Institutional Economics*, 14(4), 617-638.
doi:10.1017/S1744137417000364

Publication metadata

Title: The Hayek–Friedman hypothesis on the press: Is there an association between economic freedom and press freedom?
Author(s): Christian Bjørnskov
Journal: Journal of Institutional Economics
DOI/Link: <https://doi.org/10.1017/S1744137417000364>
Document version: Accepted manuscript

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The Hayek-Friedman Hypothesis on the Press: Is there an Association between Economic Freedom and Press Freedom?

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Abstract: The Hayek-Friedman Hypothesis states that economic freedom is causally associated with stable democracy. I test a particular element of the hypothesis focusing on press freedom, which is arguably a necessary component of any democratic polity. Combining the Freedom House index of press freedom and the Heritage Foundation Index of Economic Freedom yields a large annual panel dataset between 1993 and 2011. Estimates show that improvements of economic freedom are associated with subsequent improvements of press freedom. The overall association is mainly driven by changes in market openness.

1. Introduction

The benefits of economic freedom and good governance in terms of long-run growth and development are well documented (Acemoglu and Robinson, 2006; Berggren, 2003; Hall and Lawson, 2014). Recent studies also suggest that more economic freedom is associated with peace, lower levels of crime, higher subjective well-being and more entrepreneurial activity (e.g. Bjørnskov, 2015; Nyström, 2008; O'Reilly and Powell, 2015; Pitlik et al., 2015). However, the association between institutions and policies consistent with economic freedom and the structure of political institutions remains disputed (de Haan and Sturm, 2003; Giavazzi and Tabellini, 2005; Pryor, 2010; Rode and Gwartney, 2012).

The Hayek-Friedman Hypothesis is central to these discussions. It states that societies with high levels of political freedom, usually interpreted to mean effective democratic rights to vote and run for election extended to all adults, and the possibility to peacefully influence political decisions through other channels, must also maintain relatively high levels of economic freedom. Specifically, Hayek (1944) and Friedman (1962) argued that political freedom cannot be sustained over time if private markets become tightly regulated or directly controlled by the government. As Friedman claimed, a capitalist society with economically free citizens is a necessary (though not sufficient) prerequisite for stable democracy because competitive markets separate economic power from political power.

Conversely, in the opposite situation democracy becomes effectively restricted because the regime restricts freedom of expression and of the press. As Friedman (1962: 23-24) argued, when government controls economic life, a “hypothetical supporter of capitalism would have to persuade a government factory making paper to sell to him, the government printing press to print his pamphlets, a government post office to distribute them among the people, a government agency to rent him a hall in which to talk, and so on.” Although substantially less precisely – Hayek continually argued that it was self-evident – Hayek (1944) also saw economic freedom to be central to political freedom.

Yet, Hayek and Friedman each formulated a version decades ago and the hypothesis has since then been repeatedly criticized. The critique tends to either focus on the ground that neither writer clearly specified the mechanisms through which it works, or on the potentially weak empirical evidence for the hypothesis. The starting point of the present paper is that the central mechanism that requiring that limited economic freedom leads to a *direct* loss of free and fair elections – testing the hypothesis directly – is difficult to justify conceptually and may be too much to ask in the relatively short panels that are available today. Instead, I suggest that it is possible to test the main hypothesis by asking if economic freedom first affects the degree to which the regime – democratic or not – respects the freedom of the press.

The common theoretical mechanism alluded to in Hayek's and Friedman's contributions indeed is how extensive government control and a lack of economic freedom in most cases undermine press freedom, and thereby undermine citizens' democratic rights by either making government independent of electoral control or able to control the electorate. The conceptual starting point is thus that freedom of the press is a precondition for having political institutions that are able to be democratically responsive to voters, and a common 'core' of Hayek and Friedman's arguments. Focusing on press freedom, I first discuss in section 2 how economic freedom might theoretically affect press freedom. Section 3 presents the data, section 4 illustrates the main developments and the background for the empirical strategy employed in section 5. The paper concludes with a discussion of the broader Hayek-Friedman hypothesis and the present findings.

2. The debate and mechanisms connecting economic freedom and press freedom

As noted in the introduction, the Hayek-Friedman Hypothesis (HFH) has been repeatedly criticized, in particular since appearing in Friedman's seminal and highly influential 1962 book. The arguments against it in general take one of three directions: they either 1) argue that the understanding of political freedom in the HFH is too limited; 2) focus on the potentially weak empirical evidence for the hypothesis; or 3) criticize the hypothesis on the ground that neither Hayek nor Friedman clearly specified the mechanisms through which it works. I first briefly outline the main thrust of the debate after which I focus on the potential mechanisms connecting economic freedom to press freedom.

Defining political and economic freedom

The debate and some of its main arguments are muddled by conceptual disagreement when studies effectively argue against Hayek's – but not Friedman's – conception of political freedom (e.g. Zencey, 2012). The HFH is often discussed as a hypothesis about the association between economic freedom and democracy, but without clearly defining either concept. Friedman (1962) defined a situation without

economic freedom as one of centralized control of economic activities while Gwartney *et al.* (2015: 1) define economic freedom as a state of society where “individuals are permitted to choose for themselves and engage in voluntary transactions as long as they do not harm the person or property of others”. While this is the operational definition in most research in study of economic freedom, definitional standards are substantially more mixed in democracy studies.

The definition and operationalization of democracy remains a contested field, including everything from proponents of clean, minimalist definitions emphasizing the existence of free and fair elections with full suffrage that effectively allow the alternation of government power between different parties or interest (cf. Cheibub *et al.*, 2010) to much more maximalist definitions with strong normative components. These definitions both include features of political freedom and human rights such as press and media freedom, freedom of assembly and freedom of speech, but some maximalist definitions also include a set of specific policies deemed to be normatively desirable as outcomes of democracy as well as the constitutionalization of socio-economic rights (Kerr, 2013; Morlino, 2004; Stilz, 2014).

Such conceptual disagreements are major problems when discussing the HFH as most critique against it tends to rest on a very particular *maximalist* definition of democracy. By applying a maximalist definition, this strand of literature effectively defines a normative and ideological ‘quality’ of democracy, which contrary to the HFH is inconsistent with economic freedom. Olssen (2010: Ch. 3) for example attacks a so-called ‘neoliberal’ conception of democracy as one that “avoids questions concerning the sharing of resources or the benefits of the world’s wealth.” Yet, the enforcement of socio-economic rights is, for example, logically inconsistent with the rule of law as they provide individual citizens with specific rights based on their belonging in particular groups or categories. Hahnel (2009), in a radical left-wing critique of the liberal market order and private property rights, instead claims that economic freedom actively undermines democracy and advocates something she calls “participatory planning”. Common to all of these writers is the definition of democracy as a much more encompassing and

maximalist concept than electoral democracy with free and fair elections and a full franchise. As such, their concept of proper democracy is logically inconsistent with limited government.

Reich (2009) exemplifies another instantiation of the conceptual confusion that haunts political discussions surrounding this and related topics, where critics equate economic freedom with a neo-corporatist conception of society where government directly supports large industrial interests at the expense of average citizens, i.e. with a non-competitive version of capitalism. Such attacks on Friedman's version of the hypothesis claim that capitalism undermines democracy by creating inequality and giving undue power to large industrial interests. However, such a conception is also identical to what Zingales (2012) calls 'crony capitalism' – a societal structure in which special interests are able to buy or otherwise procure policy and legislation that effectively limits or short-circuits competition and economic freedom. As such, Reich's critique of the HFH is remarkable only by employing a non-standard definition of the concept of economic freedom.

The mixed evidence

As such, some of the critical literature rests on conceptual definitions that are rather far from the way political and economic freedom is defined by Hayek and Friedman. The empirical evidence for the HFH remains more mixed, partly for similar reasons, the partly because Hayek in particular may not have thought of the hypothesis as testable in the same way as Friedman.

Farrant and McPhail (2009) provide a representative example of the problem by summarizing the exchange between Hayek and Paul Samuelson, as well as some of the critique of Hayek's position. Hayek argued that he had issued a sincere warning of the likely path of economically unfree countries while Samuelson and several other commentators read the book as a direct prediction of a future to come (Alves and Meadowcroft, 2014). The subsequent discussion, forming a background of the empirical studies, therefore came to revolve around the question if Hayek had described an ironclad law, provided

a testable hypothesis stating that certain countries would tend towards autocracy, or merely engaged less formally in a normative political debate.

Samuelson nevertheless interpreted the Hayek's argument as a directly testable and therefore falsifiable claim. More recent studies such as Farrant and Mcphail (2009) and Alves and Meadowcroft (2014) likewise have emphasized mixed economies and the largest welfare states in Northern Europe as counter-examples of Hayek's original hypothesis, as these are able to command about half of all income without degenerating into totalitarianism. Yet, as shown by Bergh (2014), the Nordic welfare states have only survived by continual reform that has left Denmark and Sweden in particular with large government sectors but otherwise with some of the least regulated economies and strongest private property rights in the world. His main point is that the protection and expansion of economic freedom – apart from government transfers and insurance – has proved necessary to finance the welfare state without the use of force.

More conceptually benign tests of the Hayek-Friedman hypothesis – with a relatively minimalist definition including free elections, full participation and political competition, but not specific policy or institutional choices – suggest that the main thrust of the hypothesis tends to fit empirical tests. Lawson and Clark (2010) for example note that during the four decades for which measures of both freedoms exist, no society without some minimum degree of economic freedom has succeeded in upholding democratic political freedom. While societies exist with high levels of economic freedom but little democracy or other aspects of political freedom – Singapore being the most obvious example – the opposite combination is extremely rare, suggesting that economic freedom is a necessary but not sufficient condition for sustained democracy. Similar studies that associate the overall ideas with the hypothesis known as either 'douce commerce' or the democratic peace also tend to find support (e.g. de Soysa and Vadlamannati, 2013; Mousseau, 2000). Yet, the empirical literature remains mixed

Mechanisms connecting economic freedom and press freedom

While empirical studies have successfully tested the main thrust of the hypothesis, the additional critique that the HFH is undertheorized remains. The most important strand of the HFH literature thus reflects the general informality and imprecision of the main argument. As such, several studies by researchers critical to the hypothesis have pointed out the imprecision and attacked Hayek's arguments in particular for being inconsistent.

The starting point of this paper is that requiring that limited economic freedom leads to a direct and approximately immediate loss of democracy is both empirically impractical and theoretically uninformed, as it could involve a very large number of potential transmission mechanisms, which may prevent clear identification of any single mechanism. Instead, I approach the HFH from the common element in the two contributions by asking if economic freedom affects the degree to which a regime respects the freedom of the press.¹ The conceptual starting point is therefore that a sufficiently free press is arguably a necessary precondition for citizens with the formal and effective freedom to vote to also be able to cast an *informed* vote (Leeson, 2008; Sen, 1997; Strömberg, 2015).

First, while the HFH is certainly under-theorized, this is partly a consequence of the general lack of consensus of how to define democracy. Focusing on one necessary element of political freedom – the freedom of the press – offers a situation in which it is easier to formulate more precise and more directly relevant theoretical mechanisms. It also begs two clear questions: Who would be interested in limiting press freedom, and how would they go about doing it? At a basic level, two types of actors can have an underlying interest in limiting the freedom of the press: political actors and economic actors.

The political interests of limiting the information that is available to the general public are well described as a particular type of elite capture (e.g. Djankov et al., 2003; Enikolopov and Petrova, 2016).

¹ While the pertinent information when Hayek and Friedman wrote their respective books was mostly forwarded by the printed press, the relevant definition of the press has expanded considerably in recent decades. In the following, I therefore use the term press freedom as a synonym for the freedom of the media, whether printed, broadcast as radio or television, or through electronic means.

Any government has an incentive to stay in power, which is easier to achieve if the flow of information can be controlled such that any unfortunate news are either suppressed or only partially reported. With limited press freedom, government may also be able to place unchallenged information in the media that presents it in a favourably light. Having government control over the press thus allows government to avoid costly and potentially embarrassing social conflict, and protect any political or economic perks that a general public may take issue with (Leeson, 2008). Following the introduction of special interest regulation and other policies that create economic perks for specific groups or the political elite, government may therefore have a particular interest in limiting press freedom in order to avoid opposition and a loss of perceived public legitimacy. In general, the more government does and the more ways it intervenes in society, the more likely is it that such situations will arise. Finally, limiting press freedom may also be a way to protect one's international reputation by limiting any potentially damaging information from being accessible abroad.

Economic special interests may also have an interest in limiting press freedom, arising out of a desire to prevent the public dissemination of information on either the existence or consequences of monopoly-like conditions, political connections, or unwanted consequences of economic activity such as pollution (Friedman, 1962). Similar interests may apply to religious organizations that often have particularly close political connections. Bjørnskov and Freytag (2016) also hypothesize that a free press is likely to constitute a threat to organized crime and corrupt agents, which may subsequently threaten the life of journalists. In such cases, the media may be formally free in the sense of not being subject to legislative control, but will still be unfree since particular special interests – a Berlusconi in Italy, for example – are able to control the news flow. In such situations, government policies can create private incentives to limit press freedom through private means as opposed to through active lobbying for legislation. As such, limited press freedom may be either a reaction to legitimacy problems created by regulatory activity or a direct consequence of regulatory capture.

Subsequently, any mechanism connecting changes in economic freedom to *intended* as opposed to purely incidental changes in press freedom must logically rest on one of two types: Either economic freedom directly affects the ownership structure of the media or the de facto control that either government or large private and organizational interests have of the media (cf. Leeson and Coyne, 2005). Regardless of the particular mechanism, reduced press freedom is therefore a logical consequence of elite capture that is also likely to be reflected in other regulatory policy and government support schemes.

Given that any agents are interested in limiting press freedom, the next question is the mechanism through which they do so. Strömberg (2015) emphasizes that media can serve three main political purposes: agenda-setting, priming influence and framing. First, the most direct way of achieving the level of influence that allows a government or an economic interest necessary to, for example, control the agenda in public debate is to actively own the media. As such, Djankov *et al.* (2003) show empirically that government ownership of majority media is strongly associated with substantial losses of press freedom across most countries, as governments attempt to direct which information flows to the public. However, they also emphasize that the more homogenous government-owned media's news coverage becomes, the better is the business case for alternative newspapers and other media. Despite even very concentrated ownership, it can therefore be difficult for private economic interests to control the media agenda (Petrova, 2011). Conversely, government may not only have an interest in controlling the domestic media but also to restrict access to foreign media. This almost always entails restricting market openness as information often flows through similar channels as trade and international market information. This type of mechanism is logically unavailable to private interests.

In total, there are a number of mechanisms through which the HFH could operate. Regulatory activity, the size and influence of the public sector, market openness and the general quality of public institutions all may affect press freedom in one or more ways. However, more recent thinking, in part inspired by Hayek's (1960) study of constitutional political economy, provides a potentially important qualification, which I also take into account in the following. The main argument is that policies and

institutional choices that economic freedom may be of relatively little importance if implemented in polities with weak veto institutions. Hayek (1960) stressed the importance of checks and balances and veto institutions that protect minority interests. Yet, another consequence of having strong veto institutions that can block policy decisions is that they tend to make policy choices more persistent, as veto institutions also prevent policies from being changed (Keefer and Stasavage, 2003). Justesen (2014) therefore argues along with Henisz (2002) that the main effect of veto institutions is to lock in institutional changes such that institutional improvements are unlikely to be rolled back. Similarly, for the effects of policies changing economic freedom to affect *de facto* press freedom, sufficient political constraints must be in place. If not, journalists and other actors who take advantage of nominally improved press freedom may be hurt if policies change again. For policies to have full effect, central actors – in this case journalists and other actors within the media – must in other words expect that the policies are unlikely to be changed in the near future. As such, based on arguments that derive from Hayek’s further work, the HFH is more likely to hold when veto institutions tend to lock in (both good and bad) policies and institutional choices, and unlikely to hold when relevant policies can be changed easily and thus becomes unstable. This and the more general HFH is tested in the following.

3. Data and estimation strategy

The main aim of this paper is to test the hypothesis that changes in economic freedom result in changes in press freedom such that more economic freedom will under very general conditions be associated with more press freedom. In order to test this hypothesis, I employ the Freedom House (2015) index of press freedom. The index is distributed between 0 and 100, with lower scores indicating more freedom; it is therefore a measure of the *absence* of freedom. The index is available since 1993 and decomposable since 2001 into subindices on law and regulations, the political environment, and the economic environment. The index thus captures both political and legal limitations of press freedom as well as limitations created by, e.g., the ownership structure. In the following, I associate measures of economic freedom and a set

of control variables between 1992 and 2010 with the Freedom House press freedom index in the following year, i.e. in the years 1993 to 2011. As all estimates in the following include country fixed effects, the estimates thus identify the association between *within-country* changes in economic freedom with changes in press freedom in subsequent years. This choice also means that all time-invariant features such as trade costs determined by geography, distance to central markets, historical characteristics, and many other factors are effectively captured by the fixed effects.

Freedom House (2015: 25) takes its starting point in Article 19 of the Universal Declaration of Human Rights, which outlines the freedom of opinion, expression and press. The scoring rests on 23 methodology questions, seeking to capture “the varied ways in which pressure can be placed on the flow of information and the ability of print, broadcast, and internet-based media to operate freely and without fear of repercussions” (ibid.: 27). The overall index, which in principle ranges from 0 (perfect freedom) to 100 (no freedom) is composed of three subindices, covering the legal, political and economic environments of the press. In the following, I reverse all indices of press freedom such that *higher* values intuitively are associated with *more* press freedom.

The first component of the index of press freedom encompasses the extent to which the freedom of the press is actively restricted by laws and regulations, and their enforcement in practice. The political environment covers the “political control over the content of news media”, which includes editorial independence, censorship, information availability, and the de facto freedom of journalists to pursue their job. Finally, the economic environment contains a number of elements such as the industrial and ownership structure of the media, impediments of production, distribution and advertisement, and the potential effects of corruption on the media. The overall index thus includes assessments of a large variety of mechanisms that could affect the degree of press freedom, and has consequently been used in several recent empirical studies of the topic (e.g. Arrese, 2017; Dutta and Williamson, 2016; Egorov *et al.*, 2009; Stier, 2015). It is, however, specifically focused on the media only and therefore does not overlap

conceptually with the index of economic freedom except when *general* policy changes also come to affect institutional and policy changes *particular* to the press.

With respect to economic freedom, I employ the Heritage Foundation's (2015) Index of Economic Freedom (IEF), which is one of the two standard measures of the concept.² The index is a composite measure drawn together of four pillars: Rule of law, Government size, Regulatory efficiency, and Market openness. First, the rule of law is formed as the average of the protection of property rights and the freedom from corruption. Although based on subjective assessments, it is valid as it correlates highly with other measures of the rule of law from, e.g., Gwartney *et al.* (2015). Second, Government size also consists of two subindices, covering fiscal freedom, measured as the overall burden of all taxation as a percent of GDP, and government spending, capturing the size of the public sector. Third, Regulatory efficiency consists of business freedom, labour freedom and monetary freedom, measuring the absence of licensing and other directly limiting policies, hiring and firing regulations, and the existence of stable, predictable and non-inflationary monetary policy.³ Finally, the indicator of Market openness is formed from indices of trade openness measuring 1) average tariffs, the income from trade taxes, quotas and regulatory barriers to trade, 2) investment freedom, which capture transparent and equitable rules, and 3) the absence of restrictions on the movement of capital, and financial freedom, capturing transparent rules and the absence of government intervention in financial markets. These indices thus match the types of policies that are likely transmission channels of the HFH.

I also control for events that may change the political institutions, first of all the type of political regime of the country, as several recent studies find substantial differences (Møller and Skaaning, 2013; Stier, 2015). I follow the categorization in Cheibub *et al.* (2010) who separate six types: parliamentary,

² The alternative, known as the Economic Freedom of the World Index and published by the Fraser Institute, provides more detailed indicators but is only available on an annual basis since 2000 (Gwartney *et al.*, 2015).

³³ In the following, I do not include labour freedom as it is only available from 2005.

mixed and presidential democracies, and civilian, military and royal dictatorships. In the present context, it is important to emphasize that the conceptualization in Cheibub *et al.* (2010) is entirely minimalistic, such that the index only categorizes countries as democratic if citizens enjoy the effective right to vote and stand for parliament. The index thus does not contain any measures of press freedom per se. The inclusion of the regime type dummies also means that any potential, immediate direct effects of economic freedom on electoral democratic development.

As is standard, I add a set of economic control variables from the Penn World Tables, mark 7.1 (Heston *et al.*, 2012). The specification therefore includes the logarithms to population size and real GDP per capita, and a dummy indicator for negative year-on-year growth to account for effects of economic crises; all data are summarized in Table 1. In addition, I account for two types of coup d'états, both successful and failed (cf. Wintrobe, 1998). The data in the following thus include 12 successful military and 5 successful civilian coups and 17 failed military and 7 failed civilian coup attempts. Indicators for communism and membership in a commonwealth effectively capture the effects of transitions *out of* communism and the British Commonwealth.⁴ As a final indicator of political institutions, I employ Henisz's (2002) Political Constraints III index of veto player strength.

Insert Table 1 about here

Finally, I use the political constraints measure in a set of additional tests interacted with economic freedom, which provides tests of whether or not economic freedom exerts a stronger effect in conjunction with stricter political constraints, following the logic in Justesen (2014). The interactions therefore capture how veto institutions change the marginal *effectiveness* of economic freedom.⁵ All

⁴ It should be noted that because the panel starts in 1993 and therefore after the collapse of communism in Central and Eastern Europe, the communist societies in the data are not Soviet regimes, but countries such as Cuba and Laos. Likewise, the member states of the British and Dutch commonwealths are all sovereign states with the exception of Hong Kong.

⁵ Introducing an interaction between economic freedom and political constraints (proxying veto institutions) has the additional benefit of alleviating any endogeneity problems. As shown by Nizalova and Murtazashvili (2016), even when the general

regressions in the following include a full set of annual and country fixed effects, such that joint international trends and time-invariant factors – culture, political history, colonial ties etc. – are accounted for throughout. In separate tests, I rerun all regressions with subsamples that either only include democracies or exclude very poor countries, defined by Cheibub *et al.* (2010) and as those having a real GDP per capita below USD 4000 (reported in the appendix).

4. The simple picture

Figure 1, which plots the simple relation between economic freedom and press freedom in 2011, provides a first look at the data and first illustrates the strong correlation ($r=.62$) between the two types of freedom. Second, a comparison of the trend lines across observations with and without democracy indicates that the association is significantly stronger for democratic societies that are also generally freer, although the association is visible for autocracies. Yet, the significant difference mainly rests on two outlier observations with high economic freedom and little press freedom: the oil state of Bahrain and the perennial outlier in international comparisons, Singapore.

Figure 1 about here

Categorizing the 2770 observations between 1993 and 2011 with full data provides a similar picture. Among the third of the observations with high economic freedom, 71 % were also categorized as having free media by Freedom House, whereas 16 % were partly free and 13 % were considered unfree. In the third of observations with medium economic freedom, the corresponding shares were 27, 46 and 27 % while the shares among observations with low economic freedom were 7, 36 and 57 %. In other words, only seven percent of observations had simultaneously low economic freedom and high press freedom, and the only countries in which Freedom House rated their media as free that at the same time had

relation is endogenous, the interaction – i.e. the difference of the effect at weak and strong veto institutions – can be interpreted causally.

relatively low economic freedom for more than a few years are Suriname and Guyana; these countries were in the particular group in 11 and 14 years, respectively, between 1993 and 2011.

While the figure and the categorization exercise thus indicate the existence of a long-run equilibrium relation between economic freedom and press freedom, it could be spurious for several reasons. One could for example argue that overall economic development affects both or that both are consequences of the introduction of democratic political institutions. Two examples might serve to illustrate what the main data look like: the development in economic freedom and press freedom in Bangladesh and Venezuela from 1993 to 2010.

These recent examples tell similar stories as Figure 1. The Venezuelan attempt during the Chavez and Maduro regimes of creating a socialist society with little economic freedom started early on to attack the political rights of its citizens. Following the development illustrates the dramatic policy changes that followed the 2000 elections, in which Chavez's socialist party won a supermajority and used it to get parliament to allow him to rule autocratically for 12 months by presidential decree. In the data used in the following, the reforms that Chavez started during this period resulted in a 20-point drop in the Heritage Foundation's assessment of Venezuelan market openness, accompanied by a contemporaneous 34 point deterioration in the Freedom House index of press freedom. The first 24-point drop occurred in the year in which a Chavez ruled without the parliament.

As a particular consequence of the much tighter regulation and government control of the economy, the Chavez regime became able to strike down hard on media that were critical of the regime. This was most clearly demonstrated when RCTV – Venezuela's oldest and most viewed network – lost its broadcasting license in May 2007 after Chavez claimed that the station had incited to the failed 2002 coup d'état. The decision was upheld by the Supreme Court, and all RCTV equipment was seized and made immediately available to the new government-owned TVes. The government also imposed severe fines on Globovision on the grounds that it “generated civil unrest and violated a law for social responsibility from the media” (Munoz, 2013).

Bangladesh provides another example, but in which the development is in the opposite direction. In Bangladesh, the democratically elected incumbent governments had suppressed the media since the late 1980s and the intensity of suppression and government control of the media increased during the 1990s. However, following the military coup in 2007, press freedom actually improved as Freedom House (2015) assesses both the legal and regulatory situation and the political environment as substantially *less* repressive than during the fragile democracy. These improvements were preceded by liberalizing reforms implemented by the new military government.

Similar developments took place in the Central African Republic and Fiji, following military coups in 2003 and 1999, respectively. Conversely, the effective democratizations in Indonesia, Mexico and Nigeria in 1999 and Peru in 2000 were preceded by substantial improvements in the FH index, i.e. by increasing press freedom. As such, these selected examples suggest that democracy is a far from sufficient condition for the freedom of the press to exist and be respected.

5. Empirical findings

These observations and the association illustrated by the figure are only indicative of a robust relation. In Table 2, I therefore present the results of estimating the relation between either the overall index of economic freedom or its four components and press freedom. I first of all find that more populous countries with weak veto institutions have less press freedom as do countries with a communist regime or those experiencing a successful civilian coup d'état and those effectively leaving the British Commonwealth. Focusing only on the 114 countries with some experience with democracies in the sample, population size becomes negative while GDP per capita implies better press freedom.

Insert Table 2 about here

Turning to the main focus, the (lagged) Index of Economic Freedom is significant in columns 1 and 3, indicating support for a press freedom version of the HFH. However, disaggregating the index in columns 2 and 4 shows that only particular components of economic freedom are significantly associated

with press freedom: increased market openness is strongly associated with press freedom while an additional influence arises from the rule of law in democracies only. As such, the simple evidence in Table 2 suggests that liberalizing reforms of market policies and the judicial system are associated with subsequently improved press freedom.

Institutional conditions

Yet, economic reforms can be short-lived and are always surrounded by some level of policy uncertainty. Justesen (2014) therefore argues that for property rights institutions in particular may only have long-run consequences when permanence is supported by strong *veto institutions*. In the additional results reported in Tables 3, as well as in an online appendix, I therefore employ the specific areas of economic freedom in combination with an interaction with the Henisz measure of veto player strength.

With interactions, neither the interaction term nor the separate estimate of the main variable can be interpreted on their own: Because the marginal effect is the un-interacted estimate *plus* the interaction estimate evaluated at *any* value of the interacting variable, one must calculate marginal effects for a number of values (Brambor *et al.*, 2006). The bottom panel of the table therefore report the conditional effects of each of the four components of economic freedom at the 10th, 25th, 75th and 90th deciles and the median of the distribution of veto player strength. These results thus evaluate effects of economic freedom at low to high levels of veto institutions and make it is possible to evaluate the changing effects of economic freedom depending on the degree to which veto institutions make them permanent.

Insert Table 3 about here

In the table and further robustness tests in an appendix, certain results persist in both the full sample and across democracies. While the rule of law seems to positively affect the law and regulation component of press freedom (i.e. negatively affects the index), this result nevertheless fails when the poorest countries are excluded. Instead, the only robust result is that the rule of law positively affects the index capturing the economic environment when veto players have some strength. The government size

component, on the other hand, seems to negatively affect press freedom, yet this result also disappears when the poorest are excluded.

For the regulatory component of economic freedom, results are mixed. When excluding the poorest countries (in the appendix), more regulatory freedom seems associated with worse legal regulation of the press when veto player strength is limited.⁶ Conversely, it is associated with a better economic environment for press freedom when veto players have some strength. Finally, the strongest result is that for the economic environment, market openness is unconditionally beneficial for press freedom. However, given the significant correlation between three of the four components – government size is only weakly associated with the remaining three – collinearity is a potential worry. In particular, changes in components would arise if reforms tend to be implemented as packages that include changes to multiple components, which would impede the identification of component-specific effects.

Robustness tests

Yet, while the findings above suggest that only certain elements of economic freedom are associated with press freedom, they may still either be statistically fragile or not generalize to most countries. In this final section, I therefore test their robustness.

As a test of the conditional findings, I first perform a ‘beauty contest’ in which I include interactions with two measures of economic freedom at a time. The beauty contests addresses the problem that the four different interactions are strongly correlated – interacting four correlated measures with the same variable logically yields heavily correlated interaction terms – which implies that it can be difficult in practice to separate the effects. With four indicators and three outcomes, the full set of combinations of two interactions yields 18 permutations. Requiring that any interacted effect must remain significant and

⁶ This particular result that turns out to be driven by extremely few observations from rich autocracies. The observations from Singapore mainly drive these particular results.

relatively stable in terms of size, these 18 tests show clear support for three associations: 1) For the law and regulation indicator of press freedom, the conditional results pertaining to regulatory freedom and market openness remain robust; 2) for the indicator of the political environment, only the effects of government size remain stable; and 3) for the indicator of the economic environment, the beauty contest supports the robustness of effects of market openness and regulatory freedom.

As such, the occasionally significant associations with the rule of law turn out to be statistically fragile. Conversely, the remaining findings are robust to a set of additional tests. The main result – that the market openness component of economic freedom is responsible for the effects on press freedom – could for example be due to changes in trade flows that need not be associated with policy changes. Yet, adding a set of extra variables – trade volumes as a percent of GDP, Dreher's (2006) KOF measure of globalization that compounds trade and investment flows, the KOF measure of specific trade and global investment policies, and the KOF measure of social globalization and international information flows – does not change this result. Even though economic globalization in the sense of both flows and policies appear significant, their inclusion only increases the size and significance of market openness.

Additionally, I test the robustness and generalizability of the main findings by excluding the tails of the distribution of press freedom, in order to ensure that the results are not driven by extreme press freedom, and excluding the tails of the distribution of economic freedom, such that results are not driven by extremely high or low freedom. I also exclude the ten potentially most influential countries in the sample, defined as those with the largest changes in press freedom. None of these tests change the main result, although the latter test reduces the size of the point estimate by about 30 percent. To the extent that such tests can inform, the findings therefore seem to generalize to most situations and countries, as argued by Hayek and Friedman.

6. Discussion

The Hayek-Friedman Hypothesis originally stated that for democracy to be a stable political system, some level of market capitalism and economic freedom must exist. If not, democracy will gradually be undermined. Yet, the hypothesis has been contested since Hayek's 1944 *Road to Serfdom* and returned with a vengeance when Friedman's seminal book *Capitalism and Freedom* raised the discussion in 1962. The discussion has revolved around two issues: 1) whether Friedman clearly specified the mechanisms through which it works, and 2) how strong the actual empirical evidence is for the hypothesis.

This paper argues that an intuitive way to test the Hayk-Friedman Hypothesis is to take Friedman's original arguments seriously and explore the association between economic freedom and press freedom. I argue that democracy has little meaning if voters do not have access to proper information that is not controlled by government or other large interests, i.e. if society enjoys press freedom (cf. Leeson, 2008; Sen, 1997), and Friedman himself stressed press freedom as a mechanism through which his hypothesis worked. Focusing on press freedom thereby offers a way to formulate more precise hypotheses of the multitude of transmission mechanisms that could connect economic freedom and press freedom.

Testing the association between the overall Heritage Foundation Index of Economic Freedom as well as its four constitutive components and the Freedom House index of press freedom shows that the association is statistically strong. In particular, measures of market openness – composed of the freedom to trade and invest internationally and the existence of transparent and equitable rules regulating investment and financial markets – and regulatory freedom – defined as the absence of licensing and other directly limiting policies, hiring and firing regulations, and the existence of stable, predictable and non-inflationary monetary policy – positively affect press freedom. However, the results also suggest that economic freedom affects press freedom more when veto institutions are strong such that reforms can be secured in the future by veto players. As such, the estimates provide statistically strong and robust evidence for the Hayek-Friedman Hypothesis when formulated as a theory of press freedom.

An important question nevertheless is if the results are also of political and social significance, which the estimates suggest they are. The clearest example is liberalizing market openness by one standard

deviation (approximately 12 points), which results on average in an improvement of press freedom of six points. This change corresponds to 40 % of a standard deviation or a full within-country standard deviation; the corresponding numbers in the democratic subsample are 60 and 154 %. Only the event of abandoning a Communist dictatorship or experiencing a successful civilian coup that leads to a dictatorship are associated with similar or larger changes in press freedom.

The findings shed new light on at least one standard critique of the Hayek-Friedman Hypothesis: the sceptical argument that economic freedom in some way undermines the quality of democracy. While opponents of the hypothesis tend to define effective democracy as including redistributive policy and substantial market regulations, the present findings rest on a definition that includes the combination of free and fair elections and a potentially informed electorate. In his famous treatment of the association between political institutions and famine, Sen (1997: 7-8) – who is far from a proponent of Hayek and Friedman – for example emphasizes that “in the terrible history of famines in the world, no substantial famine has ever occurred in any independent and democratic country *with a relatively free press* (my emphasis).” As such, Sen puts particular importance on free access to information, and not simply the right to vote.

The present findings thereby suggest that the Hayek-Friedman Hypothesis holds for a slightly broader definition of democracy, although not one that includes particular interventionist policies. On the contrary, the results in this paper emphasize the value of policies and institutions of economic freedom in solving political problems associated with asymmetric information. As such, economic freedom not only makes countries richer, but may also have an intrinsic social and political value.

Acknowledgements

I gratefully acknowledge financial support from the Jan Wallander and Tom Hedelius Foundation. I am grateful to Niclas Berggren and two anonymous reviewers for encouragement and helpful comments on early drafts of the paper. Needless to say, all errors are entirely mine.

References

- Acemoglu, D. and J.A. Robinson. (2006), *Economic Origins of Dictatorship and Democracy*, Cambridge: Cambridge University Press.
- Alves, A.A. and J. Meadowcroft. (2014), 'Hayek's Slippery Slope, the Stability of the Mixed Economy and the Dynamics of Rent-Seeking', *Political Studies*, **62**(4): 843-861.
- Arrese, Á. (2017), 'The Role of Economic Journalism in Political Transitions', *Journalism*, **18**(3): 368-383.
- Berggren, N. (2003), 'The Benefits of Economic Freedom. A Survey', *The Independent Review*, **8**(2): 193-211.
- Bergh, A. (2014), *Sweden and the Revival of the Capitalist Welfare State*, Cheltenham: Edward Elgar.
- Bjørnskov, C. (2015), 'Does Economic Freedom Really Kill? On the Association between 'Neoliberal' Policies and Homicide Rates', *European Journal of Political Economy*, **37**: 207-219.
- Bjørnskov, C. and A. Freytag. (2016), 'An Offer You Can't Refuse: Murdering Journalists as an Enforcement Mechanism of Corrupt Deals', *Public Choice*, *167*(3-4): 221-243.
- Cheibub, J.A., J. Gandhi, and J. R. Vreeland. (2010), 'Democracy and Dictatorship Revisited', *Public Choice*, **143**(1-2): 67-101.
- De Soysa, I. and K.C. Vadlamannati. (2013), 'Do Pro-Market Reforms drive Human Rights Violations? An Empirical Assessment, 1981–2006', *Public Choice*, **155**(1-2): 163–187.
- Djankov, S., C. McLiesh, T. Nenova, and A. Shleifer. 2003, 'Who Owns the Media?', *Journal of Law and Economics*, **46**: 341-381.
- Dreher, A. (2006), 'Does Globalization Affect Growth? Empirical Evidence from a New Index', *Applied Economics*, **38**(10): 1091-1110.
- Dutta, N. and C.R. Williamson. (2016), 'Can Foreign Aid Free the Press?', *Journal of Institutional Economics*, **12**(3): 603-621.

- Egorov, G., S. Guriev, and K. Sonin. (2009), 'Why Resource-Poor Dictators allow Freer Media: a Theory and Evidence from Panel Data', *American Political Science Review*, **103**(4): 645-668.
- Enikolopov, R. and M. Petrova. (2016), 'Media Capture: Empirical Evidence', in S.P. Anderson, D. Strömberg, and J. Waldfogel (eds.), *Handbook of Media Economics*, Amsterdam: Elsevier, Chapter 17.
- Farrant, A. and E. McPhail. (2009), 'Hayek, Samuelson, and the Logic of the Mixed Economy?', *Journal of Economic Behavior & Organization*, **69**(1): 5-16.
- Freedom House. (2015), *Freedom of the Press 2015*, Washington DC: Freedom House.
- Friedman, M. (1962), *Capitalism and Freedom*, Chicago: Chicago University Press.
- Giavazzi, F. and G. Tabellini. (2005), 'Economic and Political Liberalizations', *Journal of Monetary Economics*, **52**: 1297-1330.
- Gwartney, J.D., R.A. Lawson, and J. Hall. (2015), *Economic Freedom of the World. 2015 Annual Report*. Vancouver BC: Economic Freedom Network.
- Haan, J. de and J-E. Sturm. (2003), 'Does more Democracy lead to Greater Economic Freedom? New evidence for Developing Countries', *European Journal of Political Economy*, **19**(3): 547-563.
- Hahnel, R. (2009), 'Why the Market Subverts Democracy', *American Behavioural Scientist*, **52**(7): 1006-1022.
- Hall, J. and R.A. Lawson. (2014), 'Economic Freedom of the World: An Accounting of the Literature', *Contemporary Economic Policy*, **32**(1): 1-19.
- Hayek, F. (1944), *The Road to Serfdom*, Chicago: Chicago University Press.
- Hayek, F. (1960), *The Constitution of Liberty*. London: Routledge.
- Henisz, W. (2002), 'The Institutional Environment for Infrastructure Investment', *Industrial and Corporate Change*, **11**(2): 355-389.
- Heritage Foundation. (2015), *2015 Index of Economic Freedom: Promoting Economic Opportunity and Prosperity*, Washington DC: the Heritage Foundation and the Wall Street Journal.
- Heston, A., R. Summers, and B. Aten. (2012), *Penn World Tables Version 7.1*, Philadelphia: Center for International Comparisons of Production, Income and Prices, University of Pennsylvania.

- Justesen, M.K. (2014), 'Better Safe than Sorry: how Property Rights and Veto Players jointly affect Economic Growth', *Comparative Politics*, **46**(2): 147-167.
- Keefer, P. and D. Stasavage. (2003), 'The Limits of Delegation: Veto Players, Central Bank Independence and the Credibility of Monetary Policy', *American Political Science Review*, **97**(3): 407-423.
- Kerr, G. (2013), 'Property-Owning Democracy and the Priority of Liberty', *Analyse und Kritik*, **35**(1): 71-92.
- Lawson, R.A. and J.R. Clark. (2010), 'Examining the Hayek-Friedman Hypothesis on Economic and Political Freedom', *Journal of Economic Behavior & Organization*, **74**(3): 230-239.
- Leeson, P.T. (2008), 'Media Freedom, Political Knowledge, and Participation', *Journal of Economic Perspectives*, **22**(2): 155-169.
- Leeson, P.T. and C.J. Coyne. (2005), 'Manipulating the Media', *Institutions and Economic Development*, **1-2**: 67-92.
- Morlino, L. (2004), 'What is 'Good' Democracy?', *Democratization*, **11**(5):10-32.
- Mousseau, M. (2000), 'Market Prosperity, Democratic Consolidation, and Democratic Peace', *Journal of Conflict Resolution*, **44**(4): 472-507.
- Munoz, B. (2013), 'The Media and the Citizen in Venezuela', *The New Yorker*, August 2013.
- Møller, J. and S-E. Skaaning. (2013), 'Autocracies, Democracies, and the Violation of Civil Liberties', *Democratization*, **20**(1): 82-106.
- Nizalova, O.Y. and I. Murtazashvili. (2016), 'Exogenous Treatment and Endogenous Factors: Vanishing of Omitted Variable Bias on the Interaction Term', *Journal of Econometric Methods*, **5**(1): 71-77.
- Nyström, K. (2008), 'The Institutions of Economic Freedom and Entrepreneurship: Evidence from Panel Data', *Public Choice*, **136**(3-4): 269-282.
- Olssen, M. (2010), *Liberalism, Neoliberalism, Social Democracy. Thin Communitarian Perspectives on Political Philosophy and Education*, New York: Routledge.

- O'Reilly, C. and B. Powell. (2015), 'War and the Growth of Government', *European Journal of Political Economy*, **40**(A): 31-41.
- Petrova, M. (2011), 'Newspapers and Parties: How Advertising Revenues created an Independent Press', *American Political Science Review*, **105**(4): 790-808.
- Pitlik, H., D.M. Redin, and M. Rode. (2015), 'Economic Freedom, Individual Perceptions of Life Control, and Life Satisfaction', in J.D. Gwartney, R.A. Lawson, and J.Hall (eds.), *Economic Freedom of the World: 2015 Annual Report*, Vancouver: Fraser Institute, pp. 185-202.
- Pryor, F.L. (2010), 'Capitalism and Freedom?', *Economic Systems*, **34**(1): 91-104.
- Reich, R. (2009), 'How Capitalism is Killing Democracy', *Foreign Policy*, October 12.
- Rode, M. and J.D. Gwartney. (2012), 'Does Democratization facilitate Economic Liberalization?', *European Journal of Political Economy*, **28**(4): 607-619.
- Sen, A.K. (1997), 'Democracy as a universal value', *Journal of Democracy*, **10**(3): 3-17.
- Stier, S. (2015), 'Democracy, Autocracy, and the News: the Impact of Regime Type on Media Freedom', *Democratization*, **22**(7): 1273-1295
- Stilz, A. (2014), 'Is the Free Market Fair?', *Critical Review*, **26**(3-4): 423-438.
- Strömberg, D. (2015), 'Media and Politics', *Annual Review of Economics*, **7**: 173-205.
- Zencey, E. (2012), *The Other Road to Serfdom and the Path to Sustainable Democracy*, Hanover: University Press of New England.
- Zingales, L. (2012), *A Capitalism for the People: Recapturing the Lost Genius of American Prosperity*, New York: Basic Books.
- Wintrobe, R. (1998), *The Political Economy of Dictatorship*, Cambridge: Cambridge University Press.

Table 1. Descriptive statistics

	Mean	Standard deviation	Observations
Press freedom	53.681	23.623	2784
Laws and regulation	15.796	8.479	1780
Political environment	11.616	9.438	1780
Economic environment	15.889	6.572	1780
Log GDP per capita	8.605	1.321	2783
Negative growth	.239	.426	2784
Log population size	9.041	1.704	2784
Communist	.036	.185	2784
Commonwealth	.238	.426	2784
Political constraints	.291	.207	2771
Successful military coup	.008	.086	2784
Successful civilian coup	.003	.050	2784
Failed military coup	.011	.103	2784
Failed civilian coup	.004	.063	2784
Democracy	.583	.493	2784
Index of Economic Freedom	59.307	11.066	2784
Rule of law	46.158	22.649	2784
Government size	68.311	16.728	2784
Regulatory freedom	67.319	13.986	2784
Market openness	58.986	13.111	2784

Table 2. Main results

	All 1	All 2	Democratic 3	Democratic 4
Log GDP per capita	1.469 (1.009)	1.691* (1.010)	8.461*** (1.519)	8.359*** (1.529)
Negative growth	.015 (.287)	-.004 (.288)	.757** (.356)	.724** (.357)
Log population size	-5.219*** (1.968)	-6.396*** (2.039)	-1.313 (2.828)	-2.306 (2.934)
Communist	-30.634*** (2.778)	-30.628*** (2.775)	-32.181*** (2.546)	-32.005*** (2.539)
Commonwealth	5.499*** (1.339)	5.573*** (1.344)	1.808 (3.100)	1.201 (3.102)
Political constraints	4.818*** (1.099)	4.771*** (1.100)	3.631*** (1.406)	3.816*** (1.402)
Successful military coup	-.243 (1.351)	-.177 (1.351)	.009 (3.101)	-.158 (3.099)
Successful civilian coup	-6.621*** (2.238)	-6.726*** (2.238)	-26.119*** (5.267)	-25.729*** (5.265)
Failed military coup	-1.666 (1.104)	-1.669 (1.105)	-5.230** (2.079)	-5.133** (2.079)
Failed civilian coup	-3.481* (1.801)	-3.422* (1.801)	-.989 (2.195)	-.741 (2.196)
Index of Economic Freedom	.149*** (.032)		.167*** (.040)	
Rule of law		.019 (.016)		.037** (.018)
Government size		.021 (.019)		-.015 (.024)
Regulatory freedom		-.001 (.017)		.017 (.021)
Market openness		.083*** (.019)		.099*** (.024)
Regime FE	Yes	Yes	Yes	Yes
Annual FE	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes
Observations	2770	2770	1633	1633
Countries	177	177	114	114
Within R squared	.179	.181	.243	.247
F statistic	16.96	15.74	16.50	15.21

Note: * (**) [***] denote significance at $p < .01$ ($p < .05$) [$p < .10$]. All regressions also include a constant term; numbers in parentheses are robust standard errors.

Table 3. Results, single areas of press freedom

	All Law	All Pol. env.	All Ec. Env.	All Law	All Pol. env.	All Ec. Env.	All Law	All Pol. env.	All Ec. Env.	All Law	All Pol. env.	All Ec. Env.
Political constraints	-.143 (.929)	.377 (1.169)	1.474* (.754)	.720 (2.108)	-3.368 (2.648)	2.918* (1.709)	-4.651*** (1.785)	-.030 (2.253)	-1.218 (1.453)	-1.632 (1.687)	-3.174 (2.120)	.733 (1.369)
Rule of law	.005 (.009)	.013 (.012)	.009 (.008)	.016** (.008)	.014 (.009)	.005 (.006)	.018** (.008)	.015 (.009)	.005 (.006)	.015* (.008)	.014 (.009)	.004 (.006)
Government size	-.002 (.010)	-.044*** (.013)	.006 (.008)	-.003 (.012)	-.058*** (.016)	.012 (.010)	-.001 (.010)	-.044*** (.013)	.005 (.008)	-.001 (.010)	-.044*** (.013)	.005 (.008)
Regulatory freedom	-.017* (.009)	-.010 (.011)	.002 (.007)	-.016* (.009)	-.009 (.011)	.002 (.007)	-.035*** (.010)	-.012 (.013)	-.005 (.008)	-.017* (.009)	-.011 (.011)	.002 (.007)
Market openness	.012 (.009)	.017 (.011)	.030*** (.007)	.009 (.009)	.017 (.011)	.031*** (.007)	.007 (.009)	.017 (.011)	.030*** (.007)	-.003 (.011)	.001 (.014)	.030*** (.009)
Rule of law * constraints	.039** (.020)	.005 (.025)	.015 (.016)									
Government size * constraints				.009 (.028)	.055 (.036)	-.028 (.023)						
Regulatory * constraints							.093*** (.026)	.009 (.033)	.032 (.021)			
Market openness * constraints										.052* (.028)	.064* (.035)	.002 (.023)
Observations	1759	1759	1759	1759	1759	1759	1759	1759	1759	1759	1759	1759
Countries	173	173	176	176	176	176	173	173	176	176	176	176
Within R squared	.079	.155	.043	.077	.156	.043	.084	.155	.044	.079	.157	.043
F statistic	4.61	9.85	2.41	4.47	9.94	2.44	4.93	9.85	2.46	4.60	9.99	2.38
EFI effect at												
10 th decile	.005 (.009)	.013 (.012)	.009 (.008)	-.003 (.012)	-.058*** (.016)	.012 (.010)	-.035*** (.010)	-.012 (.013)	-.005 (.008)	-.003 (.011)	.001 (.014)	.030*** (.009)
25 th decile	.008 (.008)	.014 (.011)	.007 (.007)	-.002 (.011)	-.053*** (.014)	.009 (.009)	-.026*** (.009)	-.011 (.011)	-.002 (.008)	.001 (.009)	.007 (.012)	.031*** (.008)
Median	.018** (.008)	.015 (.009)	.004 (.006)	.000 (.010)	-.040*** (.013)	.003 (.008)	-.004 (.009)	-.009 (.012)	.006 (.008)	.014 (.009)	.022* (.011)	.031*** (.007)
75 th decile	.023*** (.009)	.016 (.011)	.002 (.007)	.001 (.012)	-.033** (.015)	-.001 (.009)	.008 (.011)	-.008 (.014)	.010 (.009)	.021* (.011)	.031** (.013)	.031*** (.009)
90 th decile	.026*** (.009)	.016 (.012)	.000 (.008)	.002 (.013)	-.029* (.016)	-.003 (.010)	.015 (.012)	-.007 (.016)	.012 (.011)	.025** (.012)	.035** (.015)	.032*** (.009)

Note: * (**) [***] denote significance at $p < .01$ ($p < .05$) [$p < .10$]. All regressions also include a constant term; numbers in parentheses are robust standard errors.

Figure 1. Economic freedom and press freedom, 2010

