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Does Fleet Street shape politics?
Estimating the Effect of Newspaper Coverage about
Globalization on the Support for Unemployment Insurance

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Does *Fleet Street* shape politics?
Estimating the Effect of Newspaper Coverage about Globalization on the Support for Unemployment Insurance[*]

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Abstract

In this paper, I quantify the role of media in the formation of support for unemployment insurance. Theory suggests that individuals who feel threatened by globalization demand compensatory policies. Using a novel method of quantitative text analysis, I derive measures on the stance to globalization for all major British newspapers between 2001 and 2005. Results of regressing individual demand for unemployment insurance on my measure of globalization-specific newspaper positions show a consistent, sizable, and significant effect. This effect is in line with theoretical predictions and is robust to the inclusion of various controls such as trade effects and to accounting for biases resulting from self-selection of readers into newspapers with similar policy attitudes.

JEL Classification: F15, H11, H55, L82, D78
Keywords: Globalization, Compensation Hypothesis, Welfare State, Media, Quantitative Text Analysis

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1 Introduction

Globalization has been one of the predominant forces in shaping the global economy over the last decades.[1] With falling transportation costs, reduced barriers to trade, and rapidly growing access to the internet and other communication devices, global economic integration can be expected to intensify even further in the years to come. Although trade theorists seem to agree that economic integration and resulting specialization is overall beneficial,[2] this view is not shared by the entire public sphere. Increasing exposure to (perceived) income risks due to globalization triggers demand for compensating welfare policies as propagated by the compensation hypothesis (cf. Cameron 1978; Rodrik 1998). However, governments may find it hard to finance these welfare policies since economic integration also imposes limits on their ability to levy taxes on capital or mobile high-income earners. Understanding to which extent deepening economic globalization affects the demand for welfare policies and on which particular social groups these changes in demand concentrate is thus an essential prerequisite for assessing the sustainability of welfare systems.

This paper contributes to understanding these mechanisms by analyzing the effects of media consumption on the formation of voters' demand for compensatory policies. This combination is a novel approach since these two lines of literature have developed separately so far. On the one hand, the literature on how globalization affects individual demand for welfare policies has mostly focussed on the channels suggested by classical trade theory (e.g. Burgoon 2001; Cusack et al. 2006; Rehm 2009) and more recently also on firm-level trade effects (Walter 2010). All these papers rest on the implicit assumption that individuals are able to quantify the effect of globalization on their incomes when having trade theories and trade statistics at hand.

On the other hand, there is a recent line of research highlighting the impact of media reporting on individual behavior as well as on aggregate policy outcomes. Gentzkow and Shapiro (2004), e.g., study in a seminal paper how media reporting affects individuals' views on the US and on 9/11. La Ferrara et al. (2012) stress the importance of media consumption for fertility decisions. At the aggregate political level, Strömberg (2004) shows an impact of radio access on public spending in US regions and DellaVigna and Kaplan (2007) estimate the effect of FoxNews on Republican vote shares.[3] These papers reveal considerable effects of media reporting on both individual opinions and aggregate policy outcomes in a variety of settings. Therefore, there is good reason to expect media reporting on economic globalization to affect individual demand for compensating welfare policies. If this turns out to be the case, this gives us a far more comprehensive understanding of how globalization is going to shape size and scope of welfare systems.

Accounting explicitly for the policy position of the media consumed by individuals is the

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[1]Throughout this paper, I use the terms globalization and (international) economic integration interchangeably, cf. Rodrik (2000).

[2]Compare Newbery and Stiglitz (1984) for a dissenting position.

[3]Further related literature is Prat and Strömberg (2005); Knight and Chiang (2011); Gerber et al. (2009); Durante and Knight (2012); Faccini and Mayda (2009) with a focus on individual opinions and e.g. Gentzkow (2006); Oberholzer-Gee and Waldfogel (2009) with a focus on aggregate political outcomes. Prat and Strömberg (2011) provide a comprehensive survey on this line of literature.

second main contribution of this paper. Most of the papers mentioned above look at rather crude measures for media consumption, such as newspaper dummies, media availability, or the coverage frequency of a certain topic.[4] When using such measures, the effect of the exposure to media on political outcomes is unclear from a theoretical perspective, since the precise position of a media outlet is unknown. Often, implicit assumptions on relative positions of media outlets are made. Such assumptions seem to be justified when we are concerned with broad left-right effects. However, such assumptions are far less convincing in settings with several media outlets, several time periods, or topics rarely covered in the media.

The third main contribution of this paper consists in the construction of reliable and replicable measures for the stance of British newspapers towards globalization. The necessity to collect this data is a direct consequence of the previous argument. To collect the data, I rely on a method of quantitative text analysis propagated by Laver et al. (2003) and used by political scientists to analyze the political positions of party manifestoes and political speeches.[5] The statistical algorithm implemented by Laver et al. (2003) in their wordscores-routine creates objective and time-variant measures for topic-specific policy positions by comparing word frequencies in the dataset with those in so-called reference texts. These measures can be targeted to specific policy issues and thus go far beyond crude left-right categorizations. Applying this method to all newspaper articles on globalization in 10 major British newspapers between 2001 and 2005, I find strong support for my initial assertion that the general policy slant of a newspaper is not a good indicator for the position of a newspaper towards globalization since these two measures are neither highly correlated nor are newspapers' positions stable over time.

Being the first paper to control explicitly for the endogeneity of media consumption is the fourth main contribution of this paper. Most prior research, though in principle aware of the issue, has not tackled this point so far. However, when individuals choose to read newspapers which perfectly meet their prior opinion on an issue, most of the correlation is caused by reverse causality. Since such selection is most likely at work, it is important to control for it and to quantify the effect. In this paper, I thus instrument for the individual newspaper choice by regional readership characteristics. As it turns out in the empirical investigations, endogeneity is an issue in the data. Interestingly, the quantitative impact of endogeneity is by far larger when measuring the newspaper position in the traditional way by newspaper dummies than when using the new data collected for this paper. This result lends additional relevance to my research strategy.

The analysis requires linking individuals to the content of media information they consume. This is non-trivial in practice since hardly any survey on media consumption behavior collects the data on the socio-economic background of respondents which is necessary to control for economic effects of globalization. Due to the highly concentrated newspaper market in the UK,

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[4]The coverage frequency is a crude measure for the so-called *first-level agenda-setting*. According to the theory of *first-level agenda-setting*, more exposure to media leads to the formation of *any* opinion.

[5]The first paper in economics that goes this way is Gentzkow and Shapiro (2010). Using methods of quantitative text analysis in the vein of Laver et al. (2003) they estimate measures for the overall left-right orientation of 433 US newspapers in 2005.

however, large-scale surveys such as the British Social Attitudes Survey (BSAS) include questions on newspaper readership behavior. I use this exceptional dataset both to link newspaper readership to an individual and to control for economic effects of globalization at the individual level. Due to limitations in the availability of newspaper data and major economic control variables, I have to restrict the time-span of the investigation to the period 2001 to 2005.

Linking the measures for newspaper content to individuals in the BSAS dataset, I find evidence for the existence of an impact of media reporting on individual demand for unemployment insurance. This effect is economically significant: Moving from the most globalization-sceptical newspaper (The Star in 2002) to the most globalization supporting one (The Express in 2005) reduces the likelihood to favor an expansion of unemployment benefits by about 11 percent in the baseline regression. The inclusion of both individual socio-demographics and controls for trade effects does hardly affect this magnitude. Furthermore, coefficients are slightly smaller (by one percentage point) when accounting for self-selection into readership, but remain both statistically and economically significant. The effect of being a supporter of the Labour Party rather than non-partisan, e.g., is of comparable magnitude. Hence, the effects of media on the formation of demand for compensating policies need to be taken into account when investigating how globalization is going to shape welfare systems.

The paper proceeds as follows: In the next section, I discuss why we can expect reporting on economic globalization to have an effect on individual demand for welfare policies. In the third section, I present the data used in the empirical investigations, give a brief introduction into methods for quantitative text analysis, and explain how the text measures used in this paper are derived. Section four presents and discusses the empirical findings. The final section summarizes results and highlights its implications.

2 Theoretical Framework

2.1 The Role of Media in Shaping Policy Attitudes

Communication scientists distinguish two channels through which mass media influences individual opinions.[6] The first one is labeled *first-level agenda-setting* (cf. McCombs and Shaw 1972). This channel relates to the frequency of reporting on a certain issue. The underlying theoretical argument is that more frequent reporting leads individuals to reflect more intensely on a certain issue and thereby induces them to form an opinion. Put differently, the more often media reports on a certain issue, the lower the likelihood to find an individual without *any* opinion on that topic. However, according to this theory, the reporting frequency has no effect on *which* opinion is formed.[7]

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[6]See Protess and McCombs, eds (1991) for a broad survey.

[7]Testing this theory requires to check whether reporting intensity has an effect on the likelihood to form any opinion. The BSAS data does indeed allow respondents to state that they have no opinion on whether unemployment benefits should be increased or decreased. However, none of the undecided reads a newspaper, making it impossible to test this theory with present data. See Gerber et al. (2009) and Oberholzer-Gee and

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The role of media in the formation of specific opinions in known as *second-level agenda-setting* (Lopez-Escobar et al. 1998; Golan and Wanta 2001). This part of the theory postulates that consumption of media transmits attribute salience to the reader, i.e. media content shapes the way a reader thinks or feels about a certain issue.

In this paper, I want to test whether media consumption affects individual support for unemployment insurance, i.e. I am interested in which opinion readers form. Therefore, my analysis is more closely related to *second-level agenda-setting* and I have to use a measure of the relevant newspaper *content* in the empirical analysis.

In addition to these theoretical arguments, there is a wide range of empirical articles showing that media has an impact on individual actions and beliefs. Gentzkow and Shapiro (2004) show that the access to a TV network (AlJazeera or CNN) shapes the view of individuals on 9/11 in Arab countries. DellaVigna and Kaplan (2007) use random variation in the availability of Fox News to estimate the effect of exposure to Fox News on vote shares of Republican Candidates. La Ferrara et al. (2012) focus on rather long-lasting effects of media consumption: Using random variation in access to a TV station in Brazil, they show that changes in the family size in telenovelas have an impact on fertility decisions.

A further important issue is whether media reports in an unbiased way. If media reports in an unbiased way, then *a priori* we cannot make a clear statement on whether media has an effect on demand for compensation *in addition* to the effects described by trade theories: Media reporting might just serve as a perfect substitute for calculating the labor market effects according to economic theory. This concern is of particular relevance in settings without random variation in newspaper access such as the one used in this paper.

From a theoretical point of view, an independent additional effect of media seems to be plausible for several reasons: First, media has an incentive to over-report on bad news ("bad news is good news"), intensified by the fact that losers are often more visible than winners.[8] Second, media reporting might be plainly biased to meet readers priors.[9] Third, consumers of mass media are far too heterogeneous to allow the media outlet to give accurate and precise information on the economic prospects for every single individual among them – mass media requires generalizations and simplifications.

There is some literature providing empirical evidence on biased reporting of newspapers. Puglisi (2011) uses data on how often The New York Times reported on issues either "owned" by Democrats or Republicans between 1946 and 1997 and finds evidence of a more favorable reporting on topics "owned" by Democrats if the presidential incumbent is a Democrat. Using data on 140 US newspapers endorsing either the Democratic or the Republican presidential candidate, Larcinese et al. (2011) find that a similar pattern applies to articles on economic issues in the period 1996 to 2005.

In summary, there is evidence that media reporting is able to influence individual policy

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Waldfogel (2009) for implicit tests of this theory.

[8]In some circumstances, media might overreport on those who gain, e.g. on corporate gains due to exports. However, this does not affect the validity of this argument since it only changes the sign of the bias.

[9]This argument has been derived in theoretical models by Mullainathan and Shleifer (2005) and Gentzkow and Shapiro (2006). An early paper presenting empirical evidence on this matter is Lord et al. (1979)

attitudes in general. In the empirical analysis, I have to establish that this general relationship also holds true for the relationship between media reporting on economic globalization and individual demand for social welfare policies. Second, I have to test whether newspapers serve as a perfect proxy for economic effects, or whether there is an independent effect of newspaper content. In the former case, the estimated effect of newspaper content decreases considerably once I control for direct trade effects. If newspaper reporting contains different or additional information, however, coefficients stay much more stable.

2.2 Globalization and Demand for Welfare Policies

Testing whether newspaper content has an impact on individual attitudes in addition to pure economic effects requires accounting for these economic effects. Therefore, I discuss in this section alternative factors changing individual attitudes towards the provision of unemployment insurance with a focus on the labor market effects of economic integration.

In general, the objective of welfare policies such as unemployment insurance is either to redistribute income, to provide insurance, or a mixture of both. To understand how globalization influences individual attitudes towards these policies one therefore has to think about the impact of economic integration on both the level and the volatility of incomes.

A first line of argumentation focusses on the redistributive role of welfare policies. In addition to socio-demographic characteristics (compare e.g. Alesina and Giuliano (2010)), income expectations are found to play a major role in the formation of demand for redistribution.[10]. The role of income expectations is of importance since both classical trade theories such as Heckscher-Ohlin or Ricardo-Viner models and more recent models in the fashion of Yeaple (2005) entail relatively clear-cut predictions on who can expect to gain and who to lose when economic integration intensifies: Income gains and losses are distributed along education levels as well as sectoral and occupational affiliation. Since these cleavages are quite sticky at the individual level, forward-looking rational individuals are able to calculate the impact of economic integration on their future incomes and therefore to adjust the attitude towards redistribution appropriately.

Another line of argumentation deals with the effect of economic integration on the demand for publicly provided insurance. These arguments are based on the literature on the so-called compensation hypothesis (Rodrik 1997, 1998). An important assumption in these papers is that economic globalization does not only affect long-term income movements but also the volatility of earnings in the short-run. In this case, risk-averse individuals facing income volatility demand insurance against uncertain income levels. However, economic integration allows to diversify risks.[11] At the same time, it fosters a more specialized economic structure and facilitates the transmission of foreign shocks into the domestic economy. Since these effects push the volatility of earnings in opposite direction, the overall volatility-reducing effect of economic integration

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[10]This argument has been modeled theoretically by Benabou and Ok (2001) and tested empirically by Alesina and La Ferrara (2005).

[11]Cf. Rodrik (1998, p.1021).

needs to be assessed empirically. In a related paper, Kim (2007) is able to show that external risk as measured by the volatility of terms of trade, net trades volumes, and exchange rates increases the volatility of domestic variables such as per capita and aggregate values of income, consumption, and investment in a panel of 175 countries between 1950 and 2002.

Another source of risk is created by the potential to offshore jobs. Blinder (2009) analyzes the offshorability of jobs using detailed US labor market data for 950 different occupations in 2004. He shows that there are sizeable differences in the potential to offshore jobs and that highly offshorable jobs were *ceteris paribus* paying significantly lower wages even though the potential offshoring had not yet materialized. In a related study, Senses (2010) uses US plant-level data between 1972 and 2001 to investigate the relationship between the offshorability of occupations and the elasticity of labor demand. She finds evidence for a positive relationship between the offshorability and the elasticity of the corresponding labor demand implying an increased income risk in offshorable occupations.

On a micro-level, several aspects of both lines of argumentation have been tested to date (e.g. Burgoon 2001; Cusack et al. 2006; Rehm 2009). Walter (2010) tests the entire chain of the compensation hypothesis empirically using Swiss data from the 2007 wave of the World Values Survey. She shows that individuals who are either negatively affected by international economic integration according to the predictions of both Heckscher-Ohlin and Ricardo-Viner models or who work in highly offshorable occupations are more likely to express feelings of job insecurity. Second, this perceived insecurity translates into a higher demand for governmental activity in the economy and in a higher propensity to vote for left-wing parties.

This evidence suggests that the labor market effects of economic integration have an influence on individuals' demand for unemployment insurance: Individuals exposed to deteriorating labor market prospects increase their demand for compensatory policies. To disentangle these economic effects of integration from the effects of newspaper reporting I therefore have to control for the individual labor market effects of economic integration according to these theories.

3 Methods and Data

3.1 Measuring Newspaper Reporting: Quantitative Text Analysis

Assessing the impact of media reporting on individual decisions requires the measurement of newspapers' positions towards globalization. Applying a method of quantitative text analysis allows to generate time-varying topic-specific measures of newspaper positions. Similar methods have been used in political science for some time to quantify political positions of texts. The quantitative analysis of texts is based on the so-called salience theory, which assumes that parties do not compete by directly opposing each other on the same issue but by stressing different policy positions in their manifestoes.

The method used in this paper to infer policy positions from newspaper articles is the so-called *Wordscores* method proposed by Laver et al. (2003).[12] It treats the frequency at

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[12]See Lowe (2008) and Martin and Vanberg (2008) for further information on the Wordscores procedure.

which words occur in a text as unit of information. Using word frequencies from texts with known policy position, so-called reference texts, each word gets assigned a parameter value, the wordscore. The values of the wordscore are chosen to maximize the likelihood that the sum of all products of wordscores and word frequencies meets the known policy positions of the reference texts (textscores). The set of wordscores derived for every single word is then applied to the word frequencies of the texts to be analyzed –so-called virgin texts– to predict their policy positions.[13] An example for how the algorithm works is provided in Appendix B.2.

This method has two major advantages compared to previously used methods of hand-coding: First, it is less time-consuming. Second, it is more objective since scores obtained via hand-coding rely on decisions made by the coder.[14] On the downside, this method does not allow to analyze and compare texts in different languages. This caveat, however, is of no importance in the context of this paper.

I apply the Wordscores method to all articles on economic globalization that have been published in major British newspapers in the years 2001 to 2005.[15] In order to increase the reliability of the obtained textscores, I carefully choose the articles included in the dataset and diligently remove all spelling mistakes and every annotation added by the provider of the articles from the texts.[16] As reference texts I choose all election manifestoes of the three major British parties in the years 1992-2005.[17] Due to the work done by the Comparative Manifesto Project (Budge et al. 2001; Klingemann et al. 2006), we have reliable information on the location of these manifestos on a uni-dimensional scale measuring the parties' stance towards free trade. The party attitude towards free trade is the one among all categories in the CMP dataset which comes closest to the standard notion of economic integration. The positions of the party manifestoes are displayed in Table 1:

Table 1: Position of Election Manifestoes on Free Trade

	1992	1997	2001	2005
Conservative Party	0.30	-0.55	-0.55	0.00
Labour Party	-0.20	-0.72	-0.60	0.00
Liberal Democrats	0.00	0.12	-0.17	-0.10

The matrices containing the frequencies of words in the texts are called word-count matrices. When constructing the word-count matrices, Wordscores allows to choose either single words or groups of words as unit of analysis. Since compound words are quite rare in the English language, I perform the analysis treating groups of either two (bigrams) or three words (trigrams) as unit. Resulting textscores for both bigrams and trigrams are presented in Table 2. These textscores constitute the main explanatory variable in my empirical analysis.

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[13]To get an intuition, the reader may want to think of the first step as a maximum likelihood estimation with the textscore of the reference text on the left hand side, and the word frequencies on the right-hand side. The second step then corresponds to an out-of-sample prediction.

[14]There are quite stringent guidelines on which groups of words have to be coded in which way, so called dictionaries, involved in this process. However, some discretion of the human coder is necessarily present.

[15]All newspapers are listed in Table 2.

[16]More details on the precise procedure are given in Appendix B.1.

[17]These are provided by Pennings and Keman (no date)

Table 2: Textscores from Wordscores Procedure

Newspaper	*MondoTimes*	Textscores				
		2001	2002	2003	2004	2005
Express	Conservative	-0.16	-0.16	-0.26	0.10	0.62
Mail	Conservative	-0.29	0.06	0.03	0.34	0.05
Mirror	Leans left	-0.25	0.29	0.44	0.20	-0.39
Star	Leans right	0.43	-0.61	0.06	-0.02	0.05
Sun	Leans right	-0.26	0.09	-0.14	0.47	0.28
Telegraph	Leans right	-0.30	-0.07	-0.15	0.19	0.21
Guardian	Leans left	-0.41	-0.29	-0.06	0.02	0.04
Independent	Leans left	0.07	0.14	-0.43	0.12	-0.54
Times	Leans right	-0.26	0.03	0.35	-0.13	-0.30
Record	Leans left	-0.39	0.30	0.44	0.03	-0.31

Transformed textscores derived jointly from bigrams and trigrams using Wordscores-method from Laver et al. (2003). *MondoTimes* is a time-invariant measure of the overall political slant of a newspaper.

The values of the textscores need to be interpreted in comparison to the positions of the reference texts in Table 1. To give an example, the Express is almost as globalization sceptic in 2001 (textscore: -0.16) as the Liberal Democrats in their election manifesto (-0.17), whereas the Record (-0.39) is quite in the middle between the positions of the Liberal Democrats (-0.17) and the Conservative Party (-0.55) in 2001.

Between 2001 and 2004, newspapers move on average by almost two standard deviations to more globalization-endorsing positions. In 2004 the British labor market has been opened to workers from new Eastern European member states of the European Union. This policy change led to public concerns about adverse labor market effects. These concerns are reflected in the drop in average enthusiasm for globalization in newspapers in 2005.

Looking a single newspapers over time, it catches the eye that up-market newspapers report in a comparatively stable and globalization-sceptic way, whereas low-market papers have a more affirmative view on globalization, although reporting is far less stable over time. Although these differences are not statistically significant, the results on the stability of reporting are not unexpected.

There are two aspects to keep in mind: First, the position towards globalization is not related to the general political orientation of a newspaper. Second, reporting of newspapers is not stable over time. These findings support my initial assertion that time-invariant measures of general political slant or newspaper dummies do not fully capture the newspaper content an individual is exposed to. This problem is aggravated the longer the time horizon of the study and the less important the topic for general newspaper orientation.

3.2 Survey Data

The other main source for the data I use in this paper is the British Social Attitudes Survey (BSAS). The BSAS contains representative repeated cross-sections of the British population (approximately 3500 adult respondents each) and has been conducted by the National Centre

for Social Research on an annual basis since 1983. A wide range of information concerning social attitudes, beliefs, and values is provided for each respondent. Furthermore, standard socio-economic information on each participant has been collected.

In addition, the data set contains a wide range of questions related to the desired scope of various governmental social welfare programs including a question which specifically deals with respondent's opinion on the size of unemployment insurance:

> *Opinions differ about the level of benefits for unemployed people. Which of these two statements comes closest to your own view? Benefits for unemployed people are too low and cause hardship or, benefits for unemployed people are too high and discourage them from finding jobs?*

Agreement with the first statement is coded as one, the second one as zero. In this study, the answer to this question is used as dependent variable.

Despite the absence of a panel structure, the BSAS data set is particularly valuable for this study due to the rich set of variables on media consumption habits. The media variable I use in this paper provides information on the newspaper read by the respondent. This readership indicator allows to link newspapers' positions on economic integration to the individual level data of the BSAS. Since this question has been asked in every wave of the survey, I can look at a lot of time periods allowing me to exploit both variation within newspapers over time and between newspapers.

4 Empirical Results

Based on the previous discussion of determinants of attitudes towards unemployment insurance, estimation equations take in general the following form:[18]

$$insurance_{ijkt} = \alpha + \beta \cdot newspaperposition_{jt} + \boldsymbol{trade}'_{it}\boldsymbol{\gamma} + \boldsymbol{x}'_{it}\boldsymbol{\delta} + \boldsymbol{m}'_{kt}\boldsymbol{\eta} + \nu_j + \mu_t + \epsilon_{ijkt}$$

where $insurance$ is the attitude towards unemployment insurance, $newspaperposition$ measures the policy slant of a newspaper, $\boldsymbol{trade}$ is a vector of various measures of the economic impact of globalization, and $\boldsymbol{x}$ represents a vector of individual level control variables. $\boldsymbol{m}$ is a vector of macroeconomic conditions, and μ_t and ν_j are time- and newspaper fixed effects, respectively. Finally, ϵ is the error term. Subindex i denotes an individual, subindex j a newspaper, subindex k a region within the UK, and subindex t a year. Naturally, out of all parameters β, γ, δ, and η the focus of interest is on the parameter value of β, i.e. the impact of newspaper reporting. Since the main explanatory variable $newspaperposition_{jt}$ varies only at the newspaper level, I cluster standard errors at the newspaper level.

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[18]Row vectors in bold letters.

4.1 Baseline Results

To show that newspaper reporting affects the demand for unemployment insurance, I present the first regression results in Table 3. The primary aim of these regressions is to reveal the general pattern of how reporting influences policy demand.

Table 3: Baseline Regressions

	Dep. Var.: Extend unemployment benefits?						
	(3.1)	(3.2)	(3.3)	(3.4)	(3.5)	(3.6)	(3.7)
newspaper position	-0.258**	-0.213**	-0.219**	-0.157***	-0.163*	-0.081**	-0.090***
	(0.091)	(0.079)	(0.088)	(0.028)	(0.082)	(0.032)	(0.031)
Newspaper FE		yes				yes	yes
Macro Controls			yes		yes	yes	yes
Year FE				yes	yes	yes	yes
$R^2_{adj.}$	0.020	0.068	0.042	0.031	0.047	0.090	0.073
Obs.	7458	7458	7458	7458	7458	7458	7458

Dependent variable is binary with higher values indicating demand for higher unemployment benefits. Linear probability models in all regressions, except for regression (3.7). Marginal effects of probit estimation reported in regression (3.7). Clustered standard errors in parentheses u. Clustering at newspaper level. Statistical significance at the 10, 5, 1 percent levels denoted by *, **, *** , resp.

The first column displays results from a linear probability regression of the binary dependent variable on the main variable of interest, the measure for newspaper's policy position. As predicted in the theory section, the two variables are negatively and significantly correlated. A one standard-deviation increase in *newspaperposition* (i.e. a more pro-globalization stance) is associated with a drop in the propensity to favor more unemployment insurance by almost 14 percent. However, since the range of observed values of *newspaperposition* is not the same for all newspapers[19] one can object that this result is driven by *newspaperposition* being related to the newspaper read. Thus, I add a set of newspaper fixed effects to the regression. Coefficients hardly change at all, although the fit increases considerably. Other candidates for omitted variable biases are regional economic conditions[20] and year fixed effects. They have to be included in the regression if differences in labor market conditions over space or time affect both the demand for unemployment insurance and the way newspapers report on globalization. In this case, coefficients overestimate the true effect if macroeconomic controls are omitted. Results in regressions three to six suggest that such effects are at work. The impact of national variation across years is more pronounced than the one across regions within one year. Moreover, the size of the coefficient for *newspaperposition* drops more when including year fixed effects than with regional fixed effects. This is not surprising given the profound spatial integration of the British economy, and the at least national dimension of business cycles. Furthermore, year dummies also capture the effects of special media attention to globalization in certain years. As shown in Figure 2 in the appendix, such media attention is apparently far from being perfectly correlated with the economic importance of globalization.

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[19]Compare Table 2.

[20]These include: regional GDP per capita, the growth rate of regional real GDP, some indicators for the importance of high-skilled jobs in the regional economy, the regional unemployment rate, and some indicators for the socio-demographic composition, including long-term political preferences. For more details, see Table 10 in the appendix.

So far, I have used the linear probability estimation method. Though in principle appropriate, one can argue this method to be inferior to non-linear ones such as probit in the presence of a binary dependent variable.[21] Thus, I re-estimate the last regression using the probit estimator. As shown in regression (3.7), estimates hardly change.

In summary, this first set of regressions lends support to the main hypothesis of this paper: Being exposed to more positive media coverage of globalization reduces demand for compensatory policies. However, two major aspects raised in the theory section have not been dealt with so far: First, the choice of the newspaper might just reflect some underlying socio-demographic characteristics such as age, income, or political orientation which are known to affect welfare state attitudes as well. Second, the effect for *newspaperposition* can be expected to vanish if information from the media is a perfect substitute for knowledge about income effects predicted by trade theory. These two aspects will be explored in more depth in the next set of regressions.

4.2   Individual and Trade Controls

Factors such as age, gender, income, or political orientation have been identified to be major determinants of demand for social insurance programs (Alesina and Giuliano 2010). Furthermore, these variables influence which newspaper an individual reads, i.e. which value *newspaperposition* takes at the individual level. Thus, including a wide set of socio-demographic controls is vital for corroborating my previous results. In column 2 of Table 4, I add indicators for age categories, educational degrees, income categories, gender, ethnic origin, labor force status, and political orientation to the set of explanatory variables.

As a result, the coefficient for media content slightly decreases in size. This is the expected result when individual characteristics affect the both newspaper choice and the policy attitude of an individual. However, the magnitude of the coefficient in previous regressions is apparently not driven by the omission of these control variables. Compared to the results of the previous literature, all control variables show the expected sign and are of reasonable size.

The second major concern deals with the exclusion of trade variables. As discussed in the theory section, it cannot be ruled out that reporting of newspapers on globalization is just a perfect substitute for knowing the income effects of globalization according to trade theory. If this were the case, we could expect the coefficient for *newspaperposition* to decrease considerably when controlling for trade effects. The more stable this coefficient, the more additional information do newspapers contain.

Thus, I add a variable capturing the Heckscher-Ohlin effects of trade in regression (4.3). The variable is constructed by interacting real trade flows with non-OECD countries with a dummy for above-average educational attainment.[22] Theory predicts the coefficient to have a negative sign since qualified labor is the abundant factor in industrialized countries and thus benefits

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[21]See Angrist and Pischke (2009, p.102) for a comparison of both methods

[22]See section A.2.1 in the appendix for a more detailed description of this variable and the other trade indicators.

Table 4: Regressions with Individual and Trade Controls

	Dep. Var.: Extend unemployment benefits?						
	(4.1)	(4.2)	(4.3)	(4.4)	(4.5)	(4.6)	(4.7)
newspaper position	-0.100***	-0.095**	-0.096**	-0.096**	-0.093**	-0.096**	-0.096**
	(0.038)	(0.045)	(0.045)	(0.045)	(0.045)	(0.045)	(0.045)
Trade controls							
Heckscher-Ohlin			-2.741				-2.920
			(2.305)				(2.242)
Ricardo-Viner adv.				0.379***			0.353***
				(0.081)			(0.085)
Ricardo-Viner disadv.				0.426***			0.400***
				(0.090)			(0.095)
middle offshorability					-0.024*		-0.027*
					(0.014)		(0.014)
high offshorability					-0.022		-0.024
					(0.019)		(0.020)
(low-skilled) x (firm size)						-0.074**	-0.065*
						(0.036)	(0.034)
(medium-skilled) x (firm size)						-0.078**	-0.069**
						(0.031)	(0.029)
(high-skilled) x (firm size)						-0.112***	-0.104***
						(0.041)	(0.038)
firm size						0.078**	0.068**
						(0.033)	(0.032)
Individual controls							
female		-0.036	-0.036	-0.035	-0.038	-0.036	-0.036
		(0.025)	(0.026)	(0.025)	(0.025)	(0.026)	(0.025)
non-european		-0.097	-0.096	-0.096	-0.097	-0.094	-0.093
		(0.069)	(0.069)	(0.069)	(0.070)	(0.069)	(0.069)
unemployed		0.264***	0.265***	0.268***	0.263***	0.269***	0.272***
		(0.066)	(0.066)	(0.063)	(0.066)	(0.060)	(0.058)
out of laborforce		0.126***	0.126***	0.125***	0.126***	0.126***	0.126***
		(0.039)	(0.039)	(0.039)	(0.039)	(0.039)	(0.038)
labour		0.086**	0.086**	0.085**	0.087**	0.087**	0.086**
		(0.039)	(0.039)	(0.039)	(0.039)	(0.039)	(0.040)
libdem		-0.008	-0.007	-0.011	-0.008	-0.006	-0.007
		(0.031)	(0.031)	(0.031)	(0.031)	(0.031)	(0.030)
conservative		-0.137***	-0.137***	-0.138***	-0.135***	-0.136***	-0.135***
		(0.031)	(0.031)	(0.031)	(0.031)	(0.030)	(0.031)
Age categories		yes	yes	yes	yes	yes	yes
Education cat.		yes	yes	yes	yes	yes	yes
Income cat.		yes	yes	yes	yes	yes	yes
Newspaper FE	yes	yes	yes	yes	yes	yes	yes
Macro Controls	yes	yes	yes	yes	yes	yes	yes
Year FE	yes	yes	yes	yes	yes	yes	yes
Clustered SE	yes	yes	yes	yes	yes	yes	yes
R^2_{pseudo}	0.074	0.133	0.133	0.134	0.134	0.135	0.137
Obs.	5834	5834	5834	5834	5834	5834	5834

Dependent variable is binary with higher values indicating demand for higher unemployment benefits. Marginal effects of probit estimation reported in all columns. Clustering at newspaper level. Statistical significance at the 10, 5, 1 percent levels denoted by *, **, *** , resp.

from intensifying trade relations. The coefficient shows the expected sign in the regressions, although it is not significant at conventional levels. More importantly, the coefficient for the newspaper-content variable is virtually unaffected.

In regression (4.4), I test for the implications of the Ricardo-Viner model by adding dummies for being employed in industries with a revealed comparative advantage or disadvantage.[23] The coefficients show a lower demand for compensatory policies if individuals work in sectors favored by trade, although the difference is not statistically significant.[24] Again, both the coefficient for the textscore as well as the socio-demographic controls hardly change.

Indicators for the offshorability of an individual's occupation are included in regression (4.5).[25] According to theory, individuals demand higher protection against labor market risk when facing a greater risk of having their job being offshored, i.e. all coefficients should be positive and increasing in offshorability. The predicted ordering is indeed present in the estimates, although the signs are not correct. There are two explanations for this finding. The first one is the way in which the omitted category is constructed. Blinder (2009) lists only those occupations he estimates to be offshorable, assuming that all other occupations are not offshorable. First, this is difficult to transfer to countries using another occupational coding than the US. Second, the degree of offshorability need not always be the same as in 2004.[26] Both factors lead to a possibly imprecise composition of the control group.[27] Turning to results for other variables, the coefficients for the main variables of interest continue to show the same pattern as before.

The more recent trade literature emphasizes the role of firms in international economic exchanges.[28] The results of this literature suggest that intensifying international trade deteriorates employment prospects and wages in particular for workers of intermediate skill levels, whereas individuals with high ability can expect to improve along these two dimensions. Furthermore, this literature demonstrates that larger firms firms are more active in international economic exchange. To capture this effect, I include indicators for high, middle, and low education into the regression and interact them with a measure for the size of the workplace, i.e. the number of employees at the workplace of the respondent. The interaction terms are the coefficients of interest. From theory, we can expect positive effects for medium-skilled respondents (i.e. higher demand for compensation) and a negative one for the high-skilled. However, the effects for medium-skilled respondents show a negative sign and are significant. This result casts doubts on whether the chosen empirical adaption of the theory might be too stylized to sufficiently explain real world labor market observations. However, there are to date no better rationalizations of these effects available. Coefficients on the variable measuring newspaper

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[23]Compare AppendixA.2.1 for a description of the indicator variables.

[24]Both coefficients show a positive sign, what is due to the fact that the omitted category is made up of all respondents not employed in an exporting industry, including service and public sector employees.

[25]The highest category in Blinder's dataset, "offshore4", consists of very few and specialized occupations which are not present in my dataset.

[26]See Section A.2.1 for a description of the variable.

[27]As a side remark, Geishecker (2008) shows that employment risk of German workers due to offshorability varies considerably by job duration. In this analysis, I cannot account for this effect.

[28]Compare e.g. Yeaple (2005); Helpman (2010)

impact as well as other controls remain quite stable in terms of size and significance.

In the final regression I simultaneously test for all four trade effects. Both in terms of signs and magnitude as well as significance no remarkable changes occur with respect to previous regressions.

In summary, these results lend empirical support to the assertion that effects of newspaper reporting exist *in addition* to real trade effects. However, I cannot assess whether newspapers report in a deliberately biased way or whether the heterogeneity of readers does not allow them to transmit accurate information on individual labor market effects of globalization.

4.3   Self-selection into Reading a Specific Newspaper

A natural reason to be cautious about previous results is related to the non-random allocation of individuals into newspaper readership. If readers choose their newspaper according to how it reports on globalization,[29] then we face a problem of reverse causality since policy attitudes influence the newspaper content an individual is exposed to.[30] In this case, media content just re-enforces prior beliefs instead of shaping opinions:[31] The unadjusted coefficient for newspaper position overstates the true effect. In the past, the literature has mostly neglected this effect. Nonetheless, this issue ought to be dealt with appropriately. The standard way to tackle problems of reverse causality is to instrument for the potentially endogenous explanatory variable.

In this paper, I choose regional readership shares as instruments for individual newspaper readership decisions. These measures can be expected to have an impact on individual choices, i.e. they are valid instruments, since they relate to differences in regional availability and tastes. However, one might fear that these effects are not strong enough, leading to a weak instrument problem. First-stage results presented in the appendix show that this concern is not of major relevance. It is a bit more subtle to argue that the instruments satisfy the exclusion restriction, i.e. that they do not affect *individual* demand for unemployment policies directly. An apparent concern is related to Tiebout sorting. If individuals deliberately move to regions where more people with the same opinion on unemployment insurance are living, and if these people tend to read the same newspaper as the mover does, then this IV strategy might be problematic. This concern seems to be particularly relevant at the level of neighborhoods or small towns. Regions inhabited by millions of people, however, are less likely to be homogenous enough to impair the validity of the instrument chosen.

Nevertheless, one can object that curing the problem of reverse causality has been paid with an omitted variable bias: There may exist other factors which both affect regional readership characteristics and individual policy preferences at the same time. Think e.g. of a region with an industry declining due to international competition. First, inhabitants of this region

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[29]Durante and Knight (2012) document content-based self-selection for Italian TV consumption during the government of Berlusconi.

[30]It is possible that newspapers change reporting to cater to prior beliefs of its readership. Though a different problem in economic theory, the resulting econometric problems are the same, since the cross-sectional nature of my data does not allow me to trace individuals over time.

[31]Compare the theoretical models of Mullainathan and Shleifer (2005) and Gentzkow and Shapiro (2006).

may want to read a newspaper with a more compassionate stance towards the workers in this industry. Second, this decline may bolster demand for compensatory policies. One can control for such effects by including a rich set of regional control variables which capture the economic situation and persistent political preferences in this area. This is the approach taken in this paper. Note that the factors which potentially affect both variables are those macroeconomic indicators already included in the regressions before.

The lowest regional level at which the BSAS consistently provides information on the location of respondents are the so-called Government Office Regions. For each of these 11 regions I derive yearly regional readership shares for all newspapers in the sample from the BSAS data, exploiting the regional representativeness of the BSAS data set.[32] This set of readership shares serves as instrument in the first stage.

Formally, the estimation procedure looks as follows: In the first stage, the newspaper read is predicted via a set of regressions with a vector for the newspaper read on the left hand side. This column vector contains zeros for all newspapers not read by individual i in time t and exactly one "one"-entry for the newspaper read. NEWSPAPERSHARES$_{kt}$ represents the matrix of instruments:[33]

$$\boldsymbol{newspaper_{ijkt}} = \boldsymbol{\alpha} + \text{NEWSPAPERSHARES}_{\boldsymbol{kt}}\boldsymbol{\beta} + \text{TRADE}_{\boldsymbol{it}}\boldsymbol{\gamma} + \text{X}_{\boldsymbol{it}}\boldsymbol{\delta} + \text{M}_{\boldsymbol{kt}}\boldsymbol{\eta} + \boldsymbol{\nu_j} + \boldsymbol{\mu_t} + \boldsymbol{\epsilon_{ijkt}}$$

On the right-hand side of the equation, all rows within each vector or matrix contain the same values.

In the second stage, predicted values from the first stage are multiplied with a vector of textscores:

$$
\begin{aligned}
insurance_{ijkt} = \quad & \alpha \quad + \quad \beta \cdot \boldsymbol{newspaperposition'_t} \cdot \widehat{\boldsymbol{newspaper}}_{ijkt} \\
+ \quad & \boldsymbol{trade'_{it}}\gamma + \boldsymbol{x'_{it}}\delta + \boldsymbol{m'_{kt}}\eta + \nu_j + \mu_t + \epsilon_{ijkt}
\end{aligned}
$$

Results of first-stage regressions are shown in Tables 12 and 13 in the appendix. The regional readership ratio of a newspaper significantly increases the likelihood for a respondent to read the same newspaper.[34] The value of the F-statistic from the test on the joint significance of all instruments is never below 60 and in most cases far above. Furthermore, the effects are of sizeable magnitude, reducing the risk of a too weak relation even further. Other controls are in general of expected sign and reasonable magnitude.

The second stage follows the same structure as the regressions presented in in Table 4, with the sole difference being that I replace textscores from actually read newspapers by those from the predicted ones. Several results displayed in Table 5 catch the eye: First, coefficients for control variables are hardly affected by this change. Second, the coefficients for newspaper

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[32]These readership shares are derived using the much larger original raw data-set, reducing the risk that aggregation of too few individual data might drive first-stage results.

[33]Matrices are denoted in capital letters. Coefficients are not restricted to take the same value in both stages.

[34]Depending on the newspaper, the first stage correctly predicts the actual readership in 50 to 80 per cent of all cases.

Table 5: Second-stage IV estimates

	(5.1)	(5.2)	(5.3)	(5.4)	(5.5)	(5.6)	(5.7)
			Dep. Var.: Extend unemployment benefits?				
newspaper position	-0.083**	-0.079**	-0.087**	-0.079**	-0.079**	-0.091***	-0.089**
	(0.037)	(0.033)	(0.036)	(0.033)	(0.033)	(0.034)	(0.039)
Trade controls							
Heckscher-Ohlin			-2.987				-3.208
			(2.572)				(2.522)
Ricardo-Viner adv.				0.377***			0.346***
				(0.084)			(0.089)
Ricardo-Viner disadv.				0.423***			0.391***
				(0.092)			(0.099)
middle offshorability					-0.026*		-0.029**
					(0.014)		(0.015)
high offshorability					-0.024		-0.025
					(0.019)		(0.020)
(low-skilled) x (firm size)						-0.088**	-0.080**
						(0.037)	(0.036)
(medium-skilled) x (firm size)						-0.092***	-0.085***
						(0.032)	(0.031)
(high-skilled) x (firm size)						-0.125***	-0.119***
						(0.042)	(0.040)
firm size						0.092***	0.083**
						(0.034)	(0.033)
Individual controls							
female		-0.036	-0.036	-0.035	-0.038	-0.036	-0.037
		(0.025)	(0.025)	(0.025)	(0.024)	(0.026)	(0.025)
non-european		-0.098	-0.097	-0.097	-0.099	-0.096	-0.094
		(0.070)	(0.070)	(0.070)	(0.070)	(0.069)	(0.070)
unemployed		0.262***	0.263***	0.266***	0.261***	0.267***	0.270***
		(0.065)	(0.066)	(0.063)	(0.065)	(0.059)	(0.058)
out of laborforce		0.127***	0.128***	0.127***	0.128***	0.128***	0.128***
		(0.039)	(0.039)	(0.039)	(0.039)	(0.039)	(0.038)
labour		0.084**	0.083**	0.082**	0.084**	0.084**	0.083**
		(0.038)	(0.038)	(0.038)	(0.038)	(0.038)	(0.039)
libdem		-0.009	-0.008	-0.012	-0.009	-0.007	-0.008
		(0.031)	(0.031)	(0.030)	(0.030)	(0.031)	(0.030)
conservative		-0.138***	-0.138***	-0.139***	-0.136***	-0.138***	-0.137***
		(0.030)	(0.030)	(0.030)	(0.030)	(0.030)	(0.031)
Age categories		yes	yes	yes	yes	yes	yes
Education cat.		yes	yes	yes	yes	yes	yes
Income cat.		yes	yes	yes	yes	yes	yes
Newspaper FE	yes	yes	yes	yes	yes	yes	yes
Macro Controls	yes	yes	yes	yes	yes	yes	yes
Year FE	yes	yes	yes	yes	yes	yes	yes
Clustered SE	yes	yes	yes	yes	yes	yes	yes
R^2_{pseudo}	0.073	0.133	0.133	0.134	0.133	0.135	0.137
Obs.	5834	5834	5834	5834	5834	5834	5834

Dependent variable is binary with higher values indicating demand for higher unemployment benefits. Marginal effects of probit estimation reported in all columns. Second-stage effects reported. Clustering at newspaper level. Statistical significance at the 10, 5, 1 percent levels denoted by *, **, *** , resp.

content decrease slightly in size, gain in significance, and show by and large the same pattern across regressions as before. These changes are as expected when selection into newspapers is an issue and when reporting on globalization is positively correlated with the general political stance of a newspaper.

In summary, the results of this set of regressions show that reverse causality is an issue when estimating the effects of media content on individual policy attitudes. Accounting for self-selection into newspapers reduces the size of estimated effects, although they remain economically significant. The small reduction can be rationalized by the relatively low importance of globalization for the general policy slant of a newspaper.

4.4 Self-selection into Reading any Newspaper

In the previous section, I have shown that the size of coefficients is affected, but not primarily driven by self-selection into reading a specific newspaper. However, this analysis is conditional on the fact that respondents read a newspaper. The number of readers has decreased considerably during the period under investigation, i.e. between 2001 and 2005.[35] This process can cause an additional bias, namely self-selection into readership in general. If the decision to read any newspaper is determined by interest in newspaper reporting on globalization, then the effect of media content on individual attitudes which I estimate is systematically larger than the effect in a random sample of the overall population.

To assess the empirical relevance of this concern, I check whether my measure of newspaper reporting on globalization has an effect on the decision to read any newspaper. To that end, I estimate an equation similar to the first-stage of the IV-estimation in the previous section, replacing the set of dummies for reading a specific newspaper by a dummy for reading any newspaper. Since there are necessarily also non-readers in this sample, I can no longer assign policy positions of specific newspapers to the individual observation. As an alternative, I generate yearly averages of newspaper policy positions, both un-weighted and weighted by readership shares in the sample. Since both measures vary only across years,[36] I cluster the standard errors at the year-level. In neither of the two regressions, the newspaper content measure turns out to be significant.[37] However, regressions have been performed with six clusters only, what is not sufficient to rely on asymptotic properties of the estimator. Therefore, I re-run regressions with heteroskedasticity robust errors. In this case, asymptotics are met although I grossly underestimate the true size of standard errors. Even in this extreme case, the relevant coefficients are not significant at any conventional level. Taken together, these results provide no support for an effect of my newspaper content measure on the decision whether to read a newspaper. Reporting on globalization is apparently no source of self-selection into general newspaper readership.

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[35]Compare Figure 1 in the appendix.

[36]Thus I can no longer use year dummies. Since both the population readership share and the average policy stance exhibit time trends, I add a linear trend to control for this effect.

[37]Results available on request.

4.5 Robustness Checks

Time Structure of Effects   A first concern deserving further exploration deals with the time structure of effects. In all previous regressions I have implicitly assumed that newspaper content instantaneously affects individual policy attitudes. However, in reality it takes some time to process information and to update prior beliefs. Thus, I check whether the newspaper content of the previous period has an effect on the demand for unemployment insurance. Results are shown in Table 11 in the appendix. Since the lag structure does not allow to include observations from year 2001, I re-estimate the last regression from Table 5 on the reduced sample. Lagged values of the newspaper variables do not have any effect on reader's policy attitude in any specification. Thus, it is not restrictive to focus on contemporaneous effects.

Effects of Other Media: Internet Usage   In principle, the theoretical arguments made above apply to all kinds of media and mass information. The massive decline in newspaper readership during the last twenty years potentially challenges my estimation strategy since readers can obtain different information through other channels. If other media outlets report in the same way as the newspaper read, e.g. because of common ownership or because some media outlets simply "follow" others, then my estimates are biased upwards and vice versa. Unfortunately, I cannot control for the content of other media since methods like quantitative text analysis are not available for radio and TV and associated with prohibitively high costs for internet blogs and alike. The best proxy available in the BSAS data is information on whether other media is consumed.

   Thus, as a further robustness check I control for whether the usage of alternative media sources affects the strength of the newspaper-content effect. The BSAS dataset allows to control for the access of a household to an internet connection in a given year.[38] The fourth regression in Table 11 includes both a dummy for internet access and an interaction with newspaper content. Both the coefficients for the direct as well as the indirect effect of internet usage turn out to be insignificant. Thus, results do not support that internet usage has an impact on how strongly newspaper reporting affects policy attitudes.

Small Number of Clusters: Wild Bootstrap   In the previous regressions I have used clustered standard errors to account for the main explanatory variable taking the same value for every individual reading the same newspaper. However, clustering is not optimal either since asymptotic properties of the estimator rely on the number of clusters which is only ten in this case.[39] Cameron et al. (2008) argue that the standard adjustment procedure for clustered standard errors does not correctly state the true size of standard errors when there are only few clusters. Instead, they propose the use of a wild bootstrap procedure as described in their paper. Standard errors and coefficients for "newspaperposition" derived by wild bootstrapping are slightly smaller than those presented before. Significance and qualitative results are not

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[38]Questions regarding TV consumption have been replaced by those on the internet in 1999.
[39]Compare e.g. Angrist and Pischke (2009, p.319) and Cameron and Trivedi (2009, p.829).

affected.[40]

Correlation of Reporting on Globalization with Reporting on Labor Markets One further concern can be the following one: What if reporting on globalization has no own effect on attitudes towards unemployment insurance but rather serves as a proxy for reporting on labor market conditions itself. Let us for a moment assume that this concern is valid. In this case, the proxy can be either of good or of bad quality. In the good case, the correlation between reporting on economic integration and on labor markets is highly positive. For this to hold true, it is necessary that either a lot of articles on globalization also report on labor markets or that the number of articles on globalization develops proportionally to the number of articles on labor market issues. Figures 3 and 4 show that neither the first nor the second condition is supported by the data. Alternatively, the proxy may be weak. In this case, however, the "true" effect of reporting on labor markets has to be extremely large and at least comparable to the effect of individual employment status.

4.6 Alternative Measure of Media Consumption

Previous research on media effects has tested the effect of media consumption on reader's policy attitudes using binary information for the consumption of media in general or of specific media outlets. From a theoretical point of view, there are two major reasons why the results from these approaches differ from mine: First, available measures of newspaper slant are in most cases not tailored to a specific policy, in my case to international economic integration. Second, even when being solely interested in the general policy stance of a newspaper, available measures such as the Mondo Times Scores are in most cases not time-varying.[41] As I have shown in Table 2, positions of newspapers on specific topics vary over time and cannot be perfectly mapped into their general policy slant. In the following estimations, I demonstrate the advantage of using topic-specific measures rather than standard binary information of media consumption. I re-estimate regressions (4.1), (4.2), (4.7), and (5.7), replacing the measure of globalization-specific newspaper positions by a set of newspaper dummies. Results for this exercise are shown in Table 6.

In the baseline regression, newspaper dummies are in general highly significant and of considerable size. When including individual socio-demographic characteristics in the second regression, the magnitude of newspaper coefficients decreases considerably. Thus, selection into newspaper readership is apparently related to these characteristics. However, as the results in the third column show, direct labor market effects of international trade are virtually orthogonal to the newspaper read. In the fourth regression, I replace the dummies for the newspaper read by the predicted readership from the first stage. Except for one case, all effects vanish completely. Apparently, most of the correlation between newspaper dummies and reader's support for unemployment insurance is driven by self-selection of readers into specific newspapers:

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[40]Precise results available on request.

[41]Compare www.mondonewspapers.com

Table 6: Alternative Measure of Media Consumption: Newspaper Dummies

	Dep. Var.: Extend unemployment benefits?			
	(6.1)	(6.2)	(6.3)	(6.4)
Mail	-0.010***	-0.020***	-0.020***	-0.019
	(0.002)	(0.004)	(0.004)	(0.151)
Mirror	0.136***	0.035***	0.032***	-0.077
	(0.002)	(0.010)	(0.009)	(0.146)
Star	0.113***	-0.001	-0.005	
	(0.006)	(0.018)	(0.017)	
Sun	0.115***	0.035***	0.030**	-0.063
	(0.003)	(0.013)	(0.012)	(0.154)
Telegraph	0.067***	0.101***	0.101***	-0.094
	(0.004)	(0.012)	(0.012)	(0.161)
Guardian	0.454***	0.362***	0.367***	0.024
	(0.004)	(0.023)	(0.023)	(0.125)
Times	0.180***	0.134***	0.142***	0.198*
	(0.005)	(0.020)	(0.021)	(0.118)
Record	0.120***	0.005	-0.001	-0.142
	(0.027)	(0.034)	(0.033)	(0.134)
Trade controls				
Heckscher-Ohlin			-2.821	-4.833*
			(2.416)	(2.913)
Ricardo-Viner adv.			0.353***	0.293***
			(0.088)	(0.101)
Ricardo-Viner disadv.			0.399***	0.333***
			(0.099)	(0.110)
middle offshorability			-0.029**	-0.031*
			(0.014)	(0.017)
high offshorability			-0.026	-0.027
			(0.020)	(0.018)
(low-skilled) x (firm size)			-0.064*	-0.047
			(0.034)	(0.032)
(medium-skilled) x (firm size)			-0.068**	-0.053*
			(0.029)	(0.031)
(high-skilled) x (firm size)			-0.103***	-0.091***
			(0.038)	(0.031)
firm size			0.068**	0.051
			(0.031)	(0.031)
Individual controls				
female		-0.036	-0.037	-0.049*
		(0.025)	(0.025)	(0.028)
non-european		-0.098	-0.094	-0.099
		(0.070)	(0.069)	(0.063)
unemployed		0.263***	0.271***	0.286***
		(0.065)	(0.058)	(0.058)
out of laborforce		0.128***	0.128***	0.130***
		(0.039)	(0.038)	(0.035)
labour		0.085**	0.085**	0.105***
		(0.039)	(0.039)	(0.038)
libdem		-0.009	-0.008	0.002
		(0.031)	(0.030)	(0.033)
conservative		-0.137***	-0.135***	-0.157***
		(0.030)	(0.031)	(0.029)
Age categories		yes	yes	yes
Education cat.		yes	yes	yes
Income cat.		yes	yes	yes
Macro Controls	yes	yes	yes	yes
Year FE	yes	yes	yes	yes
Clustered SE	yes	yes	yes	yes
IV				yes
R^2_{pseudo}	0.073	0.132	0.136	0.119
Obs.	5834	5834	5834	5834

Dependent variable is binary with higher values indicating demand for higher unemployment benefits. Marginal effects of probit estimation reported in all columns. Clustering at newspaper level. *Express* is omitted newspaper. Statistical significance at the 10, 5, 1 percent levels denoted by *, **, *** , resp.

Readers self-select into reading a specific newspaper according to its general political stance, which is in turn highly correlated with reporting on important policy domains such as unemployment insurance. Calculating measures of newspaper positions on topics which are less focal for self-selection allows to identify causal effects of media content on policy attitudes even in non-experimental settings.

5   Conclusion

In this paper I estimate the effect of newspaper reporting about economic globalization on individuals' support for unemployment insurance. I use British data covering the years 2001 to 2005 which mostly stems from two data sources: First, self-collected data on the reporting of ten major British newspapers about economic globalization. This data is derived using a novel method of quantitative text analysis and provides reliable and replicable information on the policy positions of newspapers based on the frequency of word occurrences in newspaper articles. The second major source is the British Social Attitudes Survey, a large-scale socio-economic data sets which allows to link individuals to the newspaper they read.

I obtain the following empirical results: First, the more pro-globalization the reporting of a newspaper, the lower the support for unemployment insurance among its readers. This result confirms theoretical predictions derived from the compensation hypothesis and theories of media effects. The effect is of economic relevance: Moving from the most globalization-sceptical newspaper (The Star in 2002) to the most globalization supporting one (The Express in 2005) reduces the likelihood to favor an expansion of unemployment benefits by about 11 percent.

Second, the size of the effect is hardly affected by the inclusion of various trade controls. Individuals can obtain information on how globalization affects their economic situation via two channels: They can read newspapers (or consume other media) and they can directly estimate the effects using trade statistics and trade theories. If newspaper reporting served as a proxy for economic effects according to trade theories, then we would expect to see the coefficient on newspaper slant declining considerably when including trade controls. However, this is not the case. Apparently, the picture of economic globalization drawn by newspapers is not identical with pure economic effects of integration according to trade theories.

Third, individuals self-select into newspapers with a policy position similar to their own. Controlling for this effect in a set of IV regressions yields slightly smaller coefficients. However, the small magnitude of this change can be explained by the relative unimportance of globalization for the general policy stance of a newspaper and thus for the self-selection of readers. When accounting for self-selection in regressions with indicators for the readership itself, the effects of newspaper dummies vanish almost completely.

These results entail several implications: First, one should be careful in choosing the appropriate measure for newspaper influence. In the absence of (natural) experiments or good instrumentation strategies, estimates can be considerably affected by self-selection. Second,

quantitative text analysis is a reliable way to generate measures of media positions. This is of particular relevance when investigating the impact of reporting on a very narrow policy outcome. Third, the way media reports on globalization has a considerable effect on the formation of individual demand for compensation policies and thus the shape and structure of welfare systems. Understanding the links between economic globalization and compensation policies thus requires accounting for this effect.

References

Alesina, Alberto and Eliana La Ferrara, "Preferences for Redistribution in the Land of Opportunities," *Journal of Public Economics*, June 2005, *89* (5-6), 897–931.

___ **and Paola Giuliano**, *Preferences for Redistribution* Handbook of Social Economics, North Holland,

Angrist, Joshua D. and Jörn-Steffen Pischke, *Mostly Harmless Econometrics*, Princeton University Press, 2009.

Benabou, Roland and Efe A. Ok, "Social Mobility and the Demand for Redistribution: The POUM Hypothesis," *Quarterly Journal of Economics*, 2001, *116* (2), 447–487.

Blinder, Alan S., "How Many U.S. Jobs Might be Offshoreable?," *World Economics*, 2009, *10* (2), 41–78.

Budge, Ian, Hans-Dieter Klingemann, Andrea Volkens, Judith Bara, and Eric Tanenbaum, *Mapping Policy Preferences. Estimates for Parties, Electors, and Governments 1945 - 1998*, Oxford University Press, 2001.

Burgoon, Brian, "Globalization and Welfare Compensation: Disentangling the Ties that Bind," *International Organization*, 2001, *55* (3), 509–551.

Cameron, A. Colin, Jonah B. Gelbach, and Douglas L. Miller, "Bootstrap-Based Improvements for Inference with Clustered Errors," *Review of Economics and Statistics*, August 2008, *90* (3), 414–427.

Cameron, Adrian Colin and Pravin K. Trivedi, *Microeconometrics*, Cambridge: Cambridge Univ. Press, 2009.

Cameron, David R., "The Expansion of the Public Economy: A Comparative Analysis," *The American Political Science Review*, 1978, *72* (4), 1243–1261.

Cusack, Thomas, Torben Iversen, and Philipp Rehm, "Risks at Work: The Demand and Supply Sides of Government Redistribution," *Oxford Review of Economic Policy*, 2006, *22* (3), 365–389.

DellaVigna, Stefano and Ethan Kaplan, "The Fox News Effect: Media Bias and Voting," *Quarterly Journal of Economics*, 2007, *122* (3), 1187–1234.

Dreher, Axel, "Does Globalization Affect Growth? Evidence from a New Index of Globalization," *Applied Economics*, 2006, *38* (10), 1091–1110.

Durante, Ruben and Brian Knight, "Partisan Control, Media Bias, and Viewer Responses: Evidence from Berlusconi's Italy," *Journal of the European Economic Association*, 2012, *10* (3), 451–481.

Faccini, Giovanni and Anna Maria Mayda, "Illegal Immigration and Media Exposure: Evidence on Individual Attitudes," Discussion Paper 7593, CEPR 2009.

Ferrara, Eliana La, Alberto Chong, and Suzanne Duryea, "Soap Operas and Fertility: Evidence from Brazil," *American Economic Journal: Applied Economics*, 2012, *4* (4), 1–31.

Geishecker, Ingo, "The Impact of International Outsourcing on Individual Employment Security: A Micro-Level Analysis," *Labour Economics*, June 2008, *15* (3), 291–314.

Gentzkow, Matthew, "Television and Voter Turnout," *Quarterly Journal of Economics*, 2006, *121* (3), 931–972.

_ **and Jesse M. Shapiro**, "Media, Education and Anti-Americanism in the Muslim World," *The Journal of Economic Perspectives*, 2004, *18* (3), 117–133.

_ **and** _ , "Media Bias and Reputation," *The Journal of Political Economy*, 2006, *114* (2), 280–316.

_ **and** _ , "What Drives Media Slant? Evidence From U.S. Daily Newspapers," *Econometrica*, 2010, *78* (1), 35–71.

Gerber, Alan S., Dean Karlan, and Daniel Bergan, "Does the Media Matter? A Field Experiment Measuring the Effect of Newspapers on Voting Behavior and Political Opinions," *American Economic Journal: Applied Economics*, 2009, *1* (2), 35–52.

Golan, Guy J. and Wayne Wanta, "Second-level Agenda Setting in the New Hampshire Primary: A Comparison of Coverage in Three Newspapers and Public Perceptions of Candidates," *Journalism and Mass Communication Quarterly*, 2001, *78* (2), 247–259.

Helpman, Elhanan, "Labor Market Frictions as a Source of Comparative Advantage, with Implications for Unemployment and Inequality," NBER Working Paper 15764 February 2010.

Kim, So Young, "Openness, External Risk, and Volatility: Implications for the Compensation Hypothesis," *International Organization*, 2007, *61*, 181–216.

Klingemann, Hans-Dieter, Andrea Volkens, Judith Bara, Ian Budge, and Michael McDonald, *Mapping Policy Preferences 2. Estimates for Parties, Electors, and Governments in Eastern Europe, European Union, and OECD 1990 - 2003*, Oxford University Press, 2006.

Knight, Brian G. and Chun-Fang Chiang, "Media Bias and Influence: Evidence from Newspaper Endorsements," *Review of Economic Studies*, October 2011, *78*, 795–820.

Larcinese, Valentino, Riccardo Puglisi, and James M. Jr. Snyder, "Partisan Bias in Economic News: Evidence on the Agenda-Setting Behavior of U.S. Newspapers," *Journal of Public Economics*, September 2011.

Laver, Michael, Kenneth Benoit, and John Garry, "Extracting Policy Positions from Political Texts Using Words as Data," *The American Political Science Review*, 2003, *97* (2), 311–331.

Lopez-Escobar, Esteban, Juan Pablo Llamas, and Maxwell McCombs, "Agenda Setting and Community Consensus: First and Second Level Effects," *International Journal of Public Opinion Research*, 1998, *10* (4), 335–348.

Lord, Charles G., Lee Ross, and Mark R. Lepper, "Biased Assimilation and Attitude Polarization: The Effects of Prior Theories on Subsequently Considered Evidence.," *Journal of Personality and Social Psychology*, November 1979, *37* (11), 2098–2109.

Lowe, Will, "Understanding Wordscores," *Political Analysis*, 2008, *16* (4), 356–371.

Marks, Leonie A., Nicholas Kalaitzandonakes, and Srinivasa Konduru, "Images of Globalisation in the Mass Media," *World Economy*, 2006, *29* (5), 615–636.

Martin, Lanny W. and Georg Vanberg, "A Robust Transformation Procedure for Interpreting Political Text," *Political Analysis*, 2008, *16* (1), 93–100.

Mayda, Anna Maria and Dani Rodrik, "Why are Some People (and Countries) More Protectionist than Others?," *European Economic Review*, August 2005, *49* (6), 1393–1430.

McCombs, Maxwell E. and Donald L. Shaw, "The Agenda-Setting Function of Mass-Media," *Public Opinion Quarterly*, 1972, *36* (2), 176–187.

Mullainathan, Sendhil and Andrei Shleifer, "The Market for News," *The American Economic Review*, 2005, *95* (4), 1031–1053.

Newbery, David M. G. and Joseph E. Stiglitz, "Pareto Inferior Trade," *The Review of Economic Studies*, January 1984, *51* (1), 1–12.

Oberholzer-Gee, Felix and Joel Waldfogel, "Media Markets and Localism: Does Local News en Español Boost Hispanic Voter Turnout?," *American Economic Review*, 2009, *99* (5), 2120–28.

Pennings, Paul and Hans Keman, "Comparative Electronic Manifestos Project, in cooperation with the Social Science Reserach Centre Berlin (Andrea Volkens, Hans-Dieter Klingemann) the Zentralarchiv für empirische Sozialforschung, GESIS, Universität zu Köln, and the Manifesto Research Group (Chairman: Ian Budge). Financed by the Netherlands Organization for Scientific Research (NWO project 480-42-005).," no date.

Prat, Andrea and David Strömberg, "Commercial Television and Voter Information," Discussion Paper 4989, CEPR 2005.

_ **and** _ , "The Political Economy of Mass Media," Technical Report, London School of Economics 2011.

Protess, David L. and Maxwell McCombs, eds, *Agenda setting - Readings on Media, Public Opinion, and Policymaking* Communication Textbook Series: Journalism, Hillsdale, N.J.: Lawrence Erlbaum, 1991.

Puglisi, Riccardo, "Being the New York Times: the Political Behavior of a Newspaper," *The B.E. Journal of Economic Analysis & Policy*, 2011, *11* (1).

Rehm, Philipp, "Risks and Redistribution: An Individual-Level Analysis," *Comparative Political Studies*, 2009, *42* (7), 855–881.

Rodrik, Dani, *Has Globalization Gone Too Far?*, Institute for International Economics. Washington, D.C., 1997.

_ , "Why Do More Open Economies Have Bigger Governments?," *The Journal of Political Economy*, 1998, *106* (5), 997–1032.

_ , "How Far Will International Economic Integration Go?," *The Journal of Economic Perspectives*, 2000, *14* (1), 177–186.

Senses, Mine Zeynep, "The Effects of Offshoring on the Elasticity of Labor Demand," *Journal of International Economics*, May 2010, *81* (1), 89–98.

Strömberg, David, "Radio's Impact on Public Spending," *The Quarterly Journal of Economics*, 2004, *119* (1), 189–221.

Walter, Stefanie, "Globalization and the Welfare State: Testing the Microfoundations of the Compensation Hypothesis," *International Studies Quarterly*, 2010, *54* (2), 403–426.

Yeaple, Stephen Ross, "A Simple Model of Firm Heterogeneity, International Trade, and Wages," *Journal of International Economics*, January 2005, *65* (1), 1–20.

A Description of Data Set

A.1 Summary Statistics

Table 7: Summary Statistics (Raw Data)

Variable	Mean	Std. Dev.	Min.	Max.	Obs.
Dependent Variable					
insurance	0.4	0.49	0	1	15757
Newspaper Variables					
newspaper position	0.02	0.27	-0.61	0.62	10950
Mondo Times	3.77	1.13	2	5	10950
Control Variables at Individual Level					
Heckscher-Ohlin	0.03	0.04	0	0.09	23465
Ricardo-Viner adv.	0.63	0.48	0	1	23614
Ricardo-Viner disadv.	0.35	0.48	0	1	23614
middle offshorability	0.27	0.44	0	1	23614
high offshorability	0.17	0.37	0	1	23614
very high offshorability	0.01	0.12	0	1	23614
low-skilled	0.73	1.41	0	5	21234
medium-skilled	1.23	1.66	0	5	21234
high-skilled	0.87	1.58	0	5	21234
firm size	2.89	1.37	1	5	21234
female	0.57	0.5	0	1	23614
non-european	0.07	0.26	0	1	23492
unemployed	0.05	0.21	0	1	23612
out of laborforce	0.38	0.49	0	1	23612
labour	0.39	0.49	0	1	23614
libdem	0.12	0.32	0	1	23614
conservative	0.25	0.43	0	1	23614
Categorial Variables at Individual Level					
age	48.85	18.13	18	99	23614
income	8.62	4.85	1	16	20503
education	4.14	2.17	1	8	23614
Macro Controls at Regional Level					
real GDP per capita	17552.14	4137.18	13025.56	30042.74	23614
GDP growth	2.58	0.87	0.92	4.99	23614
employment share hi-tech	6.34	1.86	2.43	11.39	23614
employment share services	41.45	4.68	34.1	54	23614
unemployment rate	4.89	1.13	3.22	7.24	23614
population older 65	912666.88	257115.52	418000	1344600	23614
population density	775.16	1353.43	64.92	4741.35	23614
vote share conservative	34.88	8.57	18.63	46.2	23614
vote share labour	39.42	9.76	23.68	51.05	23614
vote share libdem	19.42	4.92	14.23	31.63	23614
year	2003.07	1.41	2001	2005	23614

Table 8: Summary Statistics (Working Sample)

Variable	Mean	Std. Dev.	Min.	Max.	Obs.
Dependent Variable					
insurance	0.4	0.49	0	1	5834
Newspaper Variables					
newspaper position	0.02	0.27	-0.61	0.62	5834
Mondo Times	3.76	1.14	2	5	5834
Control Variables at Individual Level					
Heckscher-Ohlin	0.03	0.04	0	0.09	5834
Ricardo-Viner adv.	0.64	0.48	0	1	5834
Ricardo-Viner disadv.	0.36	0.48	0	1	5834
middle offshorability	0.26	0.44	0	1	5834
high offshorability	0.17	0.38	0	1	5834
very high offshorability	0	0	0	0	5834
low-skilled	0.8	1.46	0	5	5834
medium-skilled	1.32	1.7	0	5	5834
high-skilled	0.76	1.5	0	5	5834
firm size	2.92	1.37	1	5	5834
female	0.52	0.5	0	1	5834
non-european	0.06	0.24	0	1	5834
unemployed	0.04	0.21	0	1	5834
out of laborforce	0.41	0.49	0	1	5834
labour	0.42	0.49	0	1	5834
libdem	0.1	0.3	0	1	5834
conservative	0.29	0.45	0	1	5834
Categorial Variables at Individual Level					
age	50.64	17.69	18	99	5834
income	8.44	4.77	1	16	5834
education	4.26	2.1	1	7	5834
Macro Controls at Regional Level					
real GDP per capita	17481.8	4091.36	13025.56	30042.74	5834
GDP growth	2.31	0.66	0.92	3.54	5834
employment share hi-tech	6.43	1.92	2.43	11.39	5834
employment share services	41.36	4.71	34.1	54	5834
unemployment rate	4.95	1.14	3.22	7.24	5834
population older 65	911443.16	257268.81	418000	1344600	5834
population density	765.38	1342.26	64.92	4741.35	5834
vote share conservative	35.60	8.72	18.63	46.2	5834
vote share labour	39.62	9.64	23.68	51.05	5834
vote share libdem	19.28	4.83	14.23	31.63	5834
year	2002.92	1.4	2001	2005	5834

Table 9: Descriptive Statistics for Newspaper Readers

Newspaper	insurance	cons.	libdem	labour	age	female	educ.	income	unemployed	obs.
Express	0.29	0.45	0.14	0.26	56.68	0.52	4.34	8.22	0.03	425
Mail	0.27	0.49	0.12	0.24	54.81	0.57	4.18	9.13	0.02	1440
Mirror	0.45	0.09	0.06	0.66	53.01	0.51	4.96	6.62	0.06	1095
Star	0.43	0.13	0.07	0.50	39.47	0.39	4.69	8.11	0.07	211
Sun	0.41	0.22	0.07	0.43	45.57	0.54	4.96	7.34	0.06	1796
Telegraph	0.35	0.64	0.12	0.17	57.25	0.42	3.06	11.08	0.03	501
Guardian	0.78	0.05	0.18	0.66	45.07	0.45	1.97	11.40	0.06	344
Independent	0.70	0.06	0.32	0.43	46.57	0.34	2.62	11.55	0.05	110
Times	0.45	0.37	0.14	0.32	48.48	0.40	2.26	11.75	0.03	404
Record	0.51	0.06	0.06	0.56	51.81	0.61	5.01	6.81	0.06	160

All values are shares, unless indicated otherwise. *educ.* and *income* are ordinal indicators, with higher values of *educ.* indicating a lower educational degree and higher values of *income* indicating a higher income.

A.2 Description of Variables

A.2.1 Construction of Trade Variables

Heckscher-Ohlin Captures the prediction of the Heckscher-Ohlin model. Interaction of (1) total trade flows of UK with non-OECD countries in percent of UK GDP per year and (2) qualification dummy taking the value 1 if the individual has a least an O-level qualification (hedqual<=4), 0 else.

Ricardo-Viner adv./disadv. Measures the comparative advantage or disadvantage of an industry in a given year. Constructed as in Mayda and Rodrik (2005, p.1410).

middle/high offshorability This variable is based on the data-set on the potential to off-shore jobs by Blinder (2009). The index ranks 291 occupations in the US according to their potential to be offshored using 2004 official data. All occupations not comprised in the dataset (526 out of 817) are declared to be highly non-offshorable. Since the index is ordinal in nature, I generate dummies for highly offshorable(index value between 100 and 75), offshorable(74-50), and non-offshorable (49-25) occupations as suggested by Blinder (2009). Highly non-offshorable occupations (index < 25) are the omitted category. To match these indicators to individuals in my data set, occupational classifications have to be adjusted since occupations are coded according to 3-digit International Standard Classification of Occupations (ISCO 88) in the BSAS and according to 6-digit SOC 2000 in Blinder (2009). Matching is carried out using correspondence tables provided by the UK Office for National Statistics and the US Bureau of Labor Statistics, respectively. In case that more than one SOC 2000 category corresponds to a ISCO 88 category, unweighted averages of offshorability scores are calculated.

A.2.2 Definition of Variables in Data Set

Table 10: Description of Variables

Variable	Definition	Source
Dependent Variable		
insurance	Dummy for demand for higher unemployment benefits	BSAS: dole
Newspaper Variables		
newspaper position	Text content measure	compare Section B.1
Mondo Times	Measure for general slant of newspapers	compare Section A.2.1
Control Variables at Individual Level		
Heckscher-Ohlin	Indicator: 1 if indiv. favored according to Heckscher-Ohlin, 0 else	compare Section A.2.1
Ricardo–Viner adv.	Indicator: 1 if indiv. working in favored sector according to Ricardo-Viner, 0 else	compare Section A.2.1
Ricardo–Viner disadv.	Indicator: 1 if indiv. working in disfavored sector according to Ricardo-Viner, 0 else	compare Section A.2.1
middle offshorability	Indicator: 1 if indiv. has non-offshorable occupation, 0 else	compare Section A.2.1
high offshorability	Indicator: 1 if indiv. has offshorable occupation, 0 else	compare Section A.2.1
very high offshorability	Indicator: 1 if indiv. has highly offshorable occupation, 0 else	compare Section A.2.1
low-skilled	educational attainment: no degree	BSAS: hedqual
medium-skilled	educational attainment: school degree, but no further qualification	BSAS: hedqual
high-skilled	educational attainment: further qualification or university	BSAS: hedqual
firm size	Number of employees at workplace of respondent	BSAS: rempwork
female	indicator: 1 if respondent female	BSAS: rsex
non-european	indicator: 1 if of non-european ethnical origin, 0 else	BSAS: raceori2
unemployed	indicator: 1 if unemployed, 0 else	BSAS: reconact
out of laborforce	indicator: 1 if not in labor force, 0 else	BSAS: reconact
labour	indicator: 1 if supporting Labour Party, 0 else	BSAS: partyid2
libdem	indicator: 1 if supporting Liberal Democrats, 0 else	BSAS: partyid2
conservative	indicator: 1 if supporting Conservative Party, 0 else	BSAS: partyid2
Categorial Variables at Individual Level		
age	grouped age of respondent	BSAS: age
income	grouped nominal annual household income	BSAS: hhincome
education	highest educational degree	BSAS: hedqual
Macro Controls at Regional Level		
real GDP per capity	Regional real GDP per capita	OECDstat Regional statistics
GDP growth	Growth of regional real GDP	OECDstat Regional statistics
employment share hi-tech	Share of employment in high-tech manufacturing in total manu. employment	OECDstat Regional statistics
employment share services	Share of employment in skilled services in total service employment	OECDstat Regional statistics
unemployment rate	Regional unemployment rate	OECDstat Regional statistics
population older 65	Population older than 65	OECDstat Regional statistics
population density	Regional population density: persons per square-kilometer	OECDstat Regional statistics
vote share conservative	Regional average share of votes for Conservative Party in general elections 1992-2005	House of Commons Statistical Section
vote share labour	Regional average share of votes for Labour Party in general elections 1992-2005	House of Commons Statistical Section
vote share libdem	Regional average share of votes for Liberal Democrats in general elections 1992-2005	House of Commons Statistical Section

B Quantitative Text Analysis: Wordscores Procedure

B.1 Selection and Preparation of Newspaper Articles for Text Analysis

All newspaper articles are obtained through the online database *LexisNexis*. This database allows to select articles according to the newspaper they have been published in and the date of publication. Furthermore, every article has been assigned to several keywords with a score indicating the relevance of every keyword in describing the content of the specific article.[42]

For every newspaper and year in the dataset, I select all articles with a relevance of at least 90% in at least one of the following categories: *international trade*, *foreign investment*, *enterprise globalization*, *offshoring*, *free trade treaties & agreements*, *tariffs & duties*, *non-tariff barriers*, *protectionism*, *antidumping laws*, *export controls*, *import controls*, *foreign labor*, and *migrant workers*. All articles are carefully corrected for spelling mistakes. Information describing the newspaper article that does not belong to the original article is removed. In the next step, I construct word count matrices. The routine for Wordscores implemented within Stata allows to construct these matrices treating either single words or groups of several words as unit of observation. In the analysis for this paper, I construct word count matrices for groups of two and three words. This choice reflects the rare occurrence of compound words in the English language. Results for textscores derived using these different matrices are reported in Table 2.

B.2 Quantitative Text Analysis: An Example

This paragraph provides an example for the selection of word groups to distinguish between the policy positions of unknown texts by the algorithm by Laver et al. (2003). Let us suppose there are two texts, each of them consisting of one sentence. The first sentence is *Unemployment is increased by globalization* and is coded as very anti-globalization, i.e. -1. The other sentence is *Unemployment is **not** increased by globalization* and is coded as very pro-globalization, i.e. +1. Suppose furthermore that the unit of analysis are groups of two words (so-called bigrams). The algorithm generates the following bigrams:

Unemployment is increased by globalization	-1	+1	*Unemployment is **not** increased by globalization*
Unemployment is	0	0	Unemployment is
is increased	-1	+0.5	is not
		+0.5	not increased
increased by	0	0	increased by
by globalization	0	0	by globalization

The algorithm focusses on bigrams which occur in only one of both texts since bigrams which occur in both texts are useless for distinguishing the positions. Thus, it assigns the weights to distinguish the policy positions to those bigrams which occur in only one of both

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[42]More detailed information on the precise procedures can be obtained through the company website (http://law.lexisnexis.com/infopro/Training-and-Resources/SmartIndexing-Resource-Center) or is available from the author upon request.

sentences. Bigrams occuring in both sentences receive a zero-weight. Although only one single word changes the whole meaning of the sentence, the algorithm nonetheless identifies bigrams which allow to draw inference on different policy positions.

B.3 Descriptive Statistics on Readership and Newspaper Reporting

Figure 1: Share of Newspaper Readers in Overall BSAS Sample

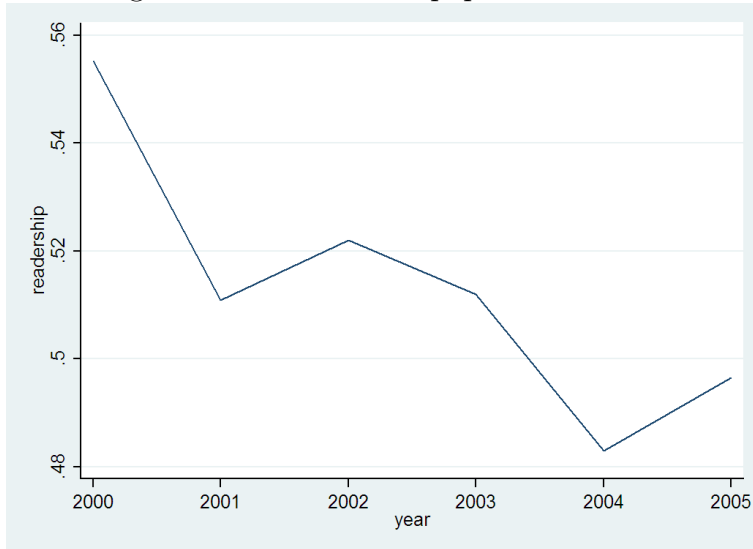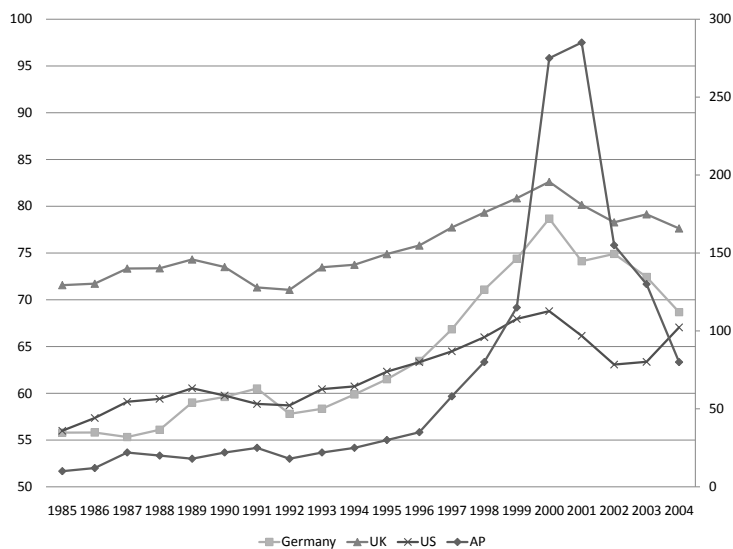Figure 2: Reporting on Economic Globalization and Index of Economic Globalization

Index of Economic Globalization for Germany, UK, and US on left scale (Dreher 2006), number of articles in Associated Press on right scale (Marks et al. 2006)

33

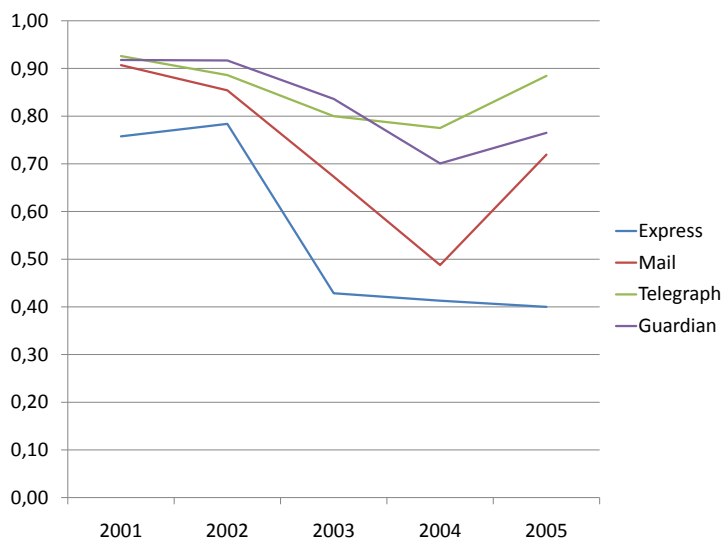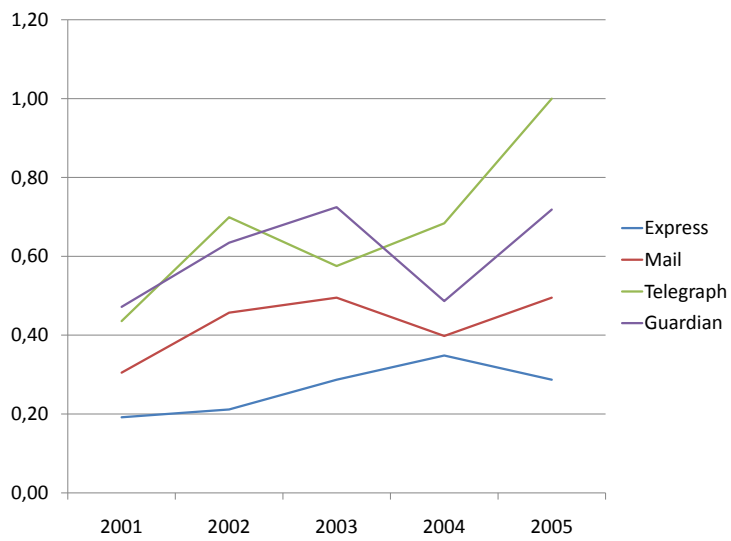Figure 3: Share of articles in sample, which do not mention labor markets

Figure 4: Ratio # articles on globalization/# articles on labor markets

C Additional Regression Results: Robustness Checks and First-Stage IV

Table 11: Robustness Checks

	Dep. Var.: Extend unemployment benefits?			
	Lag Structure			Internet
	(11.1)	(11.2)	(11.3)	(11.4)
newspaper position	-0.121***		-0.124***	-0.099**
	(0.044)		(0.042)	(0.040)
1.lag newspaper position		0.000	0.001	
		(0.001)	(0.001)	
internet				-0.029
				(0.019)
(newspaper position) x (internet)				-0.024
				(0.053)
Heckscher-Ohlin	-4.154*	-3.534	-4.046	-3.124
	(2.498)	(2.418)	(2.510)	(2.489)
Ricardo-Viner adv.	0.416***	0.420***	0.412***	0.348***
	(0.076)	(0.076)	(0.075)	(0.086)
Ricardo-Viner disadv.	0.518***	0.521***	0.512***	0.395***
	(0.101)	(0.100)	(0.099)	(0.096)
middle offshorability	-0.028*	-0.026	-0.028*	-0.027*
	(0.016)	(0.016)	(0.016)	(0.015)
high offshorability	-0.037*	-0.038*	-0.037*	-0.024
	(0.022)	(0.022)	(0.022)	(0.020)
(low-skilled) x (firm size)	-0.040	-0.040	-0.043	-0.078**
	(0.035)	(0.035)	(0.034)	(0.036)
(medium-skilled) x (firm size)	-0.026	-0.024	-0.029	-0.082***
	(0.025)	(0.025)	(0.025)	(0.031)
(high-skilled) x (firm size)	-0.072**	-0.071**	-0.075**	-0.117***
	(0.035)	(0.034)	(0.034)	(0.040)
firm size	0.033	0.033	0.036	0.081**
	(0.029)	(0.029)	(0.029)	(0.033)
female	-0.032	-0.031	-0.031	-0.036
	(0.024)	(0.024)	(0.024)	(0.025)
non-european	-0.109*	-0.107*	-0.108*	-0.091
	(0.063)	(0.062)	(0.063)	(0.069)
unemployed	0.258***	0.257***	0.256***	0.269***
	(0.075)	(0.073)	(0.073)	(0.060)
out of laborforce	0.142***	0.141***	0.141***	0.127***
	(0.036)	(0.035)	(0.035)	(0.038)
labour	0.069**	0.071**	0.068**	0.084**
	(0.031)	(0.031)	(0.030)	(0.039)
libdem	0.023	0.023	0.024	-0.005
	(0.037)	(0.037)	(0.037)	(0.031)
conservative	-0.122***	-0.121***	-0.122***	-0.135***
	(0.029)	(0.029)	(0.029)	(0.031)
R^2_{pseudo}	0.137	0.136	0.137	0.132
Obs.	4607	4607	4607	5834

Dependent variable is binary with higher values indicating demand for higher unemployment benefits. Marginal effects of probit estimation reported in all columns. Second-stage effects reported. Observations from year 2000 excluded in regressions (11.1) - (11.3). *internet* is a dummy for internet access in household. Clustering at newspaper level. Age, education, and income categories, reginal macro controls, and newspaper and year fixed effects in all regressions. Statistical significance at the 10, 5, 1 percent levels denoted by *, **, *** , resp.

Table 12: First Stage Regressions (Part 1)

	Express	Mail	Mirror	Star	Sun
			Dep. Var.: Newspaper Choice		
IV: Regional Newspaper Readership Shares					
Express	17.629***	4.380**	-6.893***	-4.659	1.592
	(2.742)	(2.037)	(1.597)	(3.041)	(2.821)
Mail	0.075	7.484***	-0.212	-1.719	-2.696*
	(1.095)	(0.975)	(0.951)	(2.053)	(1.390)
Mirror	-0.698	-2.242*	8.045***	1.674	-2.900**
	(1.617)	(1.279)	(0.982)	(2.046)	(1.127)
Star	-2.757	-2.406	1.795	40.956***	-0.357
	(3.452)	(2.667)	(3.255)	(9.349)	(4.556)
Sun	-1.510	-1.504	-1.959	0.009	4.062***
	(1.183)	(1.597)	(1.241)	(2.129)	(1.512)
Telegraph	0.104	-3.675***	0.917	-3.441	-3.919**
	(1.560)	(1.210)	(0.764)	(2.590)	(1.857)
Guardian	1.613	-6.095***	6.348**	-5.392	-0.893
	(1.847)	(1.471)	(2.871)	(6.411)	(2.522)
Independent	4.297	1.639	8.931**	1.794	-2.851
	(4.317)	(2.535)	(3.533)	(9.000)	(3.889)
Times	0.929	-3.884**	-1.334	11.672**	-0.901
	(2.410)	(1.896)	(1.713)	(5.469)	(0.890)
Record	-1.185	-2.165	0.170	2.860	-2.962**
	(1.895)	(1.371)	(1.225)	(2.307)	(1.255)
Trade controls					
Heckscher-Ohlin	-2.957	-6.130	6.085	-0.150	3.933
	(5.492)	(6.005)	(9.013)	(7.710)	(6.057)
Ricardo-Viner adv.	-0.339	0.667*	-0.082	-0.901	0.426
	(0.293)	(0.389)	(0.242)	(0.584)	(0.489)
Ricardo-Viner disadv.	-0.409	0.704*	-0.095	-0.935*	0.440
	(0.280)	(0.383)	(0.249)	(0.514)	(0.483)
middle offshorability	0.050	0.133***	-0.077	-0.024	-0.172**
	(0.056)	(0.033)	(0.078)	(0.131)	(0.078)
high offshorability	0.089	0.158***	-0.014	-0.020	-0.181**
	(0.078)	(0.041)	(0.049)	(0.108)	(0.074)
(low-skilled) x (firm size)	0.154	0.197	-0.268***		-0.341***
	(0.207)	(0.187)	(0.095)		(0.106)
(medium-skilled) x (firm size)	0.078	0.270	-0.290***	-0.087	-0.351***
	(0.227)	(0.179)	(0.091)	(0.080)	(0.106)
(high-skilled) x (firm size)	0.133	0.263*	-0.331***	-0.032	-0.360***
	(0.211)	(0.156)	(0.084)	(0.120)	(0.131)
firm size	-0.131	-0.235	0.310***	-0.004	0.347***
	(0.213)	(0.182)	(0.079)	(0.057)	(0.109)
Individual controls					
female	0.057	0.297***	-0.099*	-0.360***	0.016
	(0.069)	(0.049)	(0.051)	(0.070)	(0.047)
non-european	0.171	0.289**	0.227*	-0.269	-0.336**
	(0.106)	(0.143)	(0.129)	(0.276)	(0.167)
unemployed	-0.240	-0.028	0.116**	-0.128	-0.340***
	(0.223)	(0.127)	(0.055)	(0.171)	(0.091)
out of laborforce	-0.278**	-0.088	-0.057	-0.011	-0.034
	(0.117)	(0.090)	(0.037)	(0.103)	(0.064)
labour	-0.249**	-0.183***	0.475***	-0.066	-0.212***
	(0.118)	(0.070)	(0.085)	(0.123)	(0.067)
libdem	0.247*	0.280***	0.002	-0.346**	-0.471***
	(0.143)	(0.046)	(0.097)	(0.165)	(0.114)
conservative	0.160	0.420***	-0.495***	-0.406***	-0.235***
	(0.122)	(0.060)	(0.054)	(0.139)	(0.062)
Age categories	yes	yes	yes	yes	yes
Education cat.	yes	yes	yes	yes	yes
Income cat.	yes	yes	yes	yes	yes
Macro Controls	yes	yes	yes	yes	yes
Year FE	yes	yes	yes	yes	yes
Clustered SE	yes	yes	yes	yes	yes
R^2_{pseudo}	0.093	0.106	0.170	0.220	0.173
Obs.	5834	5834	5834	5834	5834

Dependent variable is a dummy taking the value 1 when newspaper is read. Marginal effects of probit estimation reported. Clustering at regional level. Statistical significance at the 10, 5, 1 percent levels denoted by *, **, *** , resp.

Table 13: First Stage Regressions (Part 2)

	Telegraph	Guardian	Independent	Times	Record
			Dep. Var.: Newspaper Choice		
IV: Regional Newspaper Readership Shares					
Express	-4.414	1.729	-16.011***	-0.243	177.981
	(2.747)	(3.907)	(3.322)	(2.056)	(.)
Mail	-2.947*	-5.078**	0.602	-1.776*	-40.700*
	(1.564)	(2.047)	(2.759)	(1.056)	(23.417)
Mirror	-4.835***	1.234	4.408	-0.363	-88.315**
	(0.955)	(1.060)	(3.848)	(1.446)	(40.454)
Star	-21.168***	8.806**	22.967***	-7.409*	56.744
	(4.193)	(3.477)	(7.580)	(4.256)	(.)
Sun	-3.186*	0.549	10.800***	2.189	168.543
	(1.887)	(2.317)	(3.116)	(1.331)	(.)
Telegraph	12.537***	1.492	13.852***	0.394	-118.732
	(2.813)	(2.881)	(5.110)	(1.110)	(149.470)
Guardian	6.199*	35.620***	-12.986*	1.371	151.435***
	(3.487)	(6.349)	(6.661)	(2.615)	(27.842)
Independent	-1.796	0.792	50.205***	-16.603**	229.315
	(5.682)	(7.188)	(13.128)	(8.221)	(216.401)
Times	-9.339***	7.525*	0.903	18.709***	267.979***
	(3.037)	(4.138)	(5.993)	(4.116)	(30.371)
Record	-2.299**	-0.859	5.532	-1.087	9.781
	(1.144)	(1.211)	(4.393)	(1.874)	(.)
Trade controls					
Heckscher-Ohlin	1.749	-7.023	10.591	3.578	49.480***
	(9.461)	(7.550)	(10.181)	(5.908)	(7.279)
Ricardo-Viner adv.	-0.371	-1.518***	3.917	4.545***	5.968***
	(0.341)	(0.449)	(3.135)	(0.973)	(0.100)
Ricardo-Viner disadv.	-0.249	-1.434***	3.871	4.382***	6.069
	(0.335)	(0.500)	(3.155)	(0.995)	(.)
middle offshorability	0.173*	-0.047	-0.126	0.089	0.466***
	(0.096)	(0.123)	(0.096)	(0.109)	(0.071)
high offshorability	0.187***	0.131	-0.425**	0.062	0.042
	(0.068)	(0.084)	(0.207)	(0.085)	(0.168)
(low-skilled) x (firm size)	-0.043	0.304*	-0.010	-3.815***	-0.252**
	(0.109)	(0.171)	(0.119)	(0.916)	(0.110)
(medium-skilled) x (firm size)	0.006	0.242	0.068	-3.772***	0.206*
	(0.133)	(0.220)	(0.124)	(0.899)	(0.105)
(high-skilled) x (firm size)	0.056	0.238	-0.052	-3.667***	-0.159
	(0.136)	(0.228)	(0.064)	(0.919)	(0.130)
firm size	-0.043	-0.283	-0.022	3.798***	0.051
	(0.139)	(0.202)	(0.086)	(0.892)	(0.105)
Individual controls					
female	-0.126***	-0.078	-0.281**	-0.143**	0.284***
	(0.045)	(0.104)	(0.137)	(0.068)	(0.081)
non-european	-0.086	0.005	-0.611***	0.224	
	(0.112)	(0.093)	(0.066)	(0.178)	
unemployed	0.459**	0.325	0.446	-0.156	0.201***
	(0.180)	(0.348)	(0.483)	(0.203)	(0.062)
out of laborforce	0.217	-0.109	-0.224	0.199	-0.151
	(0.152)	(0.137)	(0.139)	(0.129)	(0.191)
labour	-0.060	0.454***	0.135	-0.111	0.203**
	(0.109)	(0.160)	(0.096)	(0.105)	(0.095)
libdem	0.239*	0.314*	0.359	0.022	-0.449*
	(0.145)	(0.180)	(0.221)	(0.131)	(0.250)
conservative	0.677***	-0.531**	-0.772***	0.002	-0.482***
	(0.100)	(0.215)	(0.164)	(0.095)	(0.067)
Age categories	yes	yes	yes	yes	yes
Education cat.	yes	yes	yes	yes	yes
Income cat.	yes	yes	yes	yes	yes
Macro Controls	yes	yes	yes	yes	yes
Year FE	yes	yes	yes	yes	yes
Clustered SE	yes	yes	yes	yes	yes
R^2_{pseudo}	0.093	0.106	0.170	0.220	0.173
Obs.	5834	5834	5834	5834	5834

Dependent variable is a dummy taking the value 1 when newspaper is read. Marginal effects of probit estimation reported. Clustering at regional level. Statistical significance at the 10, 5, 1 percent levels denoted by *, **, *** , resp.