Are Justices of the US Supreme Court Islands Unto Themselves? Examining external influences on US Supreme Court rulings in securities cases

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Abstract

Prospects of economic development have come to be linked to the transparency, predictability and independence of legal enforcement mechanisms under the common law tradition. The positive impact of common law rests on the independence of courts. This paper examines whether the voting behavior of Supreme Court justices in 423 rulings in 49 cases related to securities legislation since 1936, shows systematic variation in a range of measures of the personal ideological stance of the justices, a range of measures of prevailing economic conditions, and a range of measures of prevailing political conditions. We find that the voting behavior does vary significantly with respect to all three, both statistically and substantively.

Keywords: US Supreme Court, securities legislation, ideological influence, influence of economic conditions, political influence

JEL classification:

1. Introduction

It has become commonplace to assert that institutions are critical to the long-run performance of economies.

At its most general the argument is Coasian: sound institutions lower transactions costs, thereby accelerating the rate at which exchange transactions among agents can grow. This proposition has been advanced with respect to a range of social constructs, from the specifics of property rights, to the "rules of the game" governing interactions between agents. Empirically, the link has been defended as being both strong, and as more robust and important than competitor explanations. Whichever conception of institutions is adopted, legal systems play a central role in defining the formal rules of the game and hence institutions of a society. La Porta et al (1998) explicitly examine the impact of legal rules protecting corporate shareholders and creditors, and the quality of their enforcement. In a data set covering 49 countries, they report the strongest protection of shareholder and creditor rights in common-law countries, the weakest in French civil-law countries, while German and Scandinavian civil-law countries are located in the middle. In La Porta et al (1998), this argument is extended to securities legislation.

Our concern is an examination of legal rules protecting shareholders and creditors, which henceforward we will refer to as "investors." The focus is on the country that serves as the quintessential example of operating under the common-law tradition - the United States of America. The strength of common-law juridical systems has been held to be that it is transparent, and subject to impartial arbitration through the courts, hence free from discretionary interventions from the executive branch of government. As a result, the uncertainty surrounding investment in fixed capital is lowered, and a higher rate of capital accumulation and hence growth can be maintained over time.

Since the critical link in the chain of argument is that the legal rules be transparently and impartially enforced, enforcement through the courts is crucial. The focus of this paper are Supreme Court rulings in cases that relate to investor protection since the 1930s. The question is whether the court rulings are subject to systematic extraneous influence in three distinct dimensions: the ideological predisposition of sitting Supreme Court justices, the prevailing political climate as evidenced in the United States House of Representatives and Senate, and the prevailing economic conditions. All three forms of influence could serve to limit the extent to which the application of the common law serves to lower investor uncertainty through the protection of investors. If the rulings of the Supreme Court come to be influenced systematically by the ideological predisposition of sitting justices, the business cycle and prevailing political conditions, it is no longer exclusively the application of the principles established by precedent that comes to determine the legal ruling. Hence the decision of the court becomes subject to the same sources of influence and hence uncertainty, that are argued to compromise the effectiveness of the civil law tradition for the purposes of economic development.

In order to focus specifically on the protection of investors, we restrict our study to Supreme Court decisions made in the context of US securities legislation. The U.S. securities laws enacted in the 1930s were among the first modern regulations of the financial industry, and they have represented a model for several foreign jurisdictions. Investor protection arises in a number of contexts in the securities legislation. The scope of the securities laws, by their definition of "security" trigger the obligation to register and disclose information, as well as the availability of specific private causes of action designed to protect investors. The availability of private causes of actions to investors allegedly harmed by false, misleading or incomplete statements in the purchase or sale of securities, and the burden of proof that they need to satisfy to prevail, as well as the burden of the proof that the Securities and Exchange Commission (SEC) has to satisfy in order to establish a violation of the securities laws, both directly affect investor protection. The rights of investors have been also been directly affected by Supreme Court decisions on mergers and acquisition.

\[\text{Though the model is not uncontested - see Karmel (2008), Choi (2004), and He (2013).}\]
The innovation of the paper is threefold. First, it is the first paper to our knowledge to examine systematically the impact of the three potential sources of influence on justices’ rulings related to the protection of investors under the securities regulation. It does so on a unique data set covering the 1936-2011 period collected specifically for the purpose of this study. Second, it controls for three potential sources of influence on Supreme Court rulings. Third, it proposes an estimation strategy that addresses endogeneity concerns that have confronted some previous studies that have examined possible ideological influences on Supreme Court decisions. We consider 423 rulings by justices on 49 cases related to the US securities legislation, and ask whether any evidence of influence of ideological preferences, of prevailing or economic circumstances are evident in these decisions. We control for a number of distinct measures of ideology, and of the political and economic environments.

We proceed as follows. In section 2, we contextualize our study. Section 3 presents the data and its sources used for the present study. Section 4 details the estimation methodology, while section 5 reports our empirical findings. Section 6 concludes.

2. Background

Debate on the independence of Supreme Court justices is as old as the constitution of the United States. The design of the institution of the Supreme Court was intended to ensure independence by the granting of life tenure and the prohibition of salary reductions.\(^5\)

Given this exceptional job and pay security of chief justices, why might we suppose that they would not be independent? The most trivial explanation is that no person is an island unto themselves. All individuals, even ones as exalted as Supreme Court justices are subject to a wide array of influencing factors, through the economic activity they partake in, the media they consume, the interaction with individuals, organizations and institutions around them, the pressing social and political debates of their times. It is not inconceivable that what influences Congress and the national media, influences justices also, if not necessarily consciously so. Deeper explanations might lie in the ability of the executive or the legislature to act strategically so as to place pressure on the Supreme Court (Roosevelt’s attempts to pack the court are an obvious example). Or alternatively, justices may implicitly be aware of the fact that the very independence of the Supreme Court may be conditional on the maintenance of a minimum level of legitimacy. After all, the very institutional design of the Supreme Court, is an attempt to minimize the influence of such considerations - thereby acknowledging the presence of such influence.

Whether the court is in fact independent, is a matter of long-standing controversy in legal debates.

\(^5\)For a discussion of the necessary conditions for judicial independence over and above secure salary and tenure, see Bermant and Wheeler (1995) and Ginsburg (1983).
"Legalists" argue that legal interpretation can and should be separated from, and not be influenced by politics or other ideological beliefs. According to this perspective, *stare decisis* and original interpretation of statutes constrain the judge and interpretative judicial decision-making. "Legal realists," contest that such a view of the law is factually incorrect, in the sense that judges are influenced by their ideological and political views, and in the case of some proponents of legal realism, they *should* decide cases also on the basis of these views.

The presumption that justices are influenced by prevailing social conditions, and potentially by their personal biases, fundamentally rests on the proposition that the application of the law occurs in the context of vague and old legislation, framed under very different sociopolitical contexts, necessitating interpretation.

Moreover, Supreme Court Justices are nominated by Presidents, and confirmed through Senate hearings. While there is debate on the appropriate extent of the role of the Senate, the inclusion of both the elected executive and the elected legislature in the appointments process renders the selection of candidates inherently political. This is reflected in the fact that since the inception of the process, the interaction between Presidents and the Senate on Supreme Court appointments has generated strong political tensions. In 1795, senators rejected the appointment of John Rutledge as Chief Justice by President Washington, because of Rutledge’s opposition to the “Jay Treaty” approved by the Senate. Evidence suggests that the Senate rejected 21 presidential nominations during the nineteenth century, in a substantial proportion on ideological grounds. In the twentieth century, similar rejections of nominees occurred in the case of John Parker (President Hoover), Clement Haynsworth (President Nixon), Harrold Carswell (President Nixon), Robert Bork (President Reagan), a number of nominations were withdrawn due to the threat of filibustering, while the appointment of Louis Brandeis (President Wilson) and Charles Hughes (President Hoover) was surrounded by controversy. Presidents are clearly aware of their influence on the court. The court-packing plan of President Roosevelt, and President Nixon’s appointment of Justices Burger and Blackmun, were both explicitly motivated by the desire to shape the attitude of the Court (on the New Deal, and criminal procedure respectively). What is more, the appointments process appears to have become politically more charged.

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8 The procedure defined by the Constitution was a last minute compromise in September 1787 - initially the intent was to grant the legislature the power to elect Supreme Court justices. See Strauss and Sunstein (1992). In the case of civil law countries such as France, Spain, Germany, Italy, appointment is often subject to the satisfaction of "technical" requirements (e.g. examinations) either instead of, or in addition to political selection. See Epstein et al (2001).
10 See Lively (1986).
11 See Rees (1983)
12 See the discussions in Chemerinsky (2003), Freund (1988), Powe (1991) and Shaffer (2005). By way of example of the impact of filibustering, see for example the promotion of Abe Fortas to Chief Justice proposed by Lyndon Johnson or of nominees Thornberry and Miers.
over time, while the internal functioning of the Court itself has been subject to division, as evidenced by the rising proportion of cases subject to dissent and the politicization of clerkships. Ironically the relative insulation of Supreme Court justices from direct external pressure, may itself raise the likelihood of their personal preferences influencing their rulings - sufficiently so that some appointments do not fulfill the expectations of the appointing President.

To the best of our knowledge, little attention has been given to the impact of prevailing social conditions and justices’ ideology on the regulation of financial markets in particular. Only one paper has explored the attitude of the Roberts Court toward securities litigation, with a finding that the Roberts court is indifferent to the substance of the securities laws and their policies, that the court has not favored corporate defendants, but rather conserved the status quo. However, the analysis is entirely unempirical - see Pritchard (2011).

There is, however, a wider empirical literature on the influencing factors on rulings of the courts. Origins of this body of findings lie with Pritchett (1941), one of the first studies to track the voting behavior of justices empirically. A number of studies have tackled the question of the relevance of the ideology of justices in the context of general constitutional questions, and politically divisive issues such as abortion and procreative rights, sexual conduct, freedom of speech, separation of church and state, gun control, procedural protections for the accused in criminal cases, governmental powers, often finding a correlation between policy preferences and decisions. Others have found a relationship between the ideology of justices, their voting behavior on an aggregate body of cases that does not distinguish between social, economic, securities and other types of legislation, the selection of cases to hear by higher courts, patterns of higher court reversals of prior rulings, the tendency to favour specific classes of plaintiffs or defendants, and the interpretative techniques employed by the justices. In broader contexts, research investigates the sensitivity of the Supreme Court to external pressures. This relates to the impact of ideological differences between the Court and Congress, whether judges are responsive to public opinion, or the business cycle.

There is thus a significant gap in the existing literature on the correlation between ideology and judicial decision-making in the technical area of securities regulation. Since the enactment of the securities laws in the

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14Chemerinsky (2003) and Strauss and Sunstein (1992) attribute this to an increased frequency of Presidents and Senate majorities being from divergent parties.
15See Epstein et al (2012) Table 3-2.
17For instance Chief Justice Earl Warren disappointed Eisenhower sufficiently to lead the President to supposedly define his appointment as "the biggest damn fool mistake I have ever made." More recently, Justices Kennedy, Blackmun, O’Connor and Souter, among others, have all been viewed as ideologically fluid.
21See Ringhand (2007) and Segal and Howard (2001).
22See Farnsworth (2012).
25See Epstein and Martin (2010).
1930s, the Supreme Court has decided a significant number of cases in this field. There is considerable room for interpretation in securities legislation. Most securities regulation cases that come before the Supreme Court deal with the interpretation of the federal securities laws: statutes enacted approximately eighty years ago (even if often updated), that need to be applied to the finance sector - one of the more rapidly evolving and innovative industries in the economy. Often the statutes are vague or ambiguous, leaving room for different interpretations. We list a few examples. First is the scope of the securities laws themselves, where the definition of “security” that triggers the obligation to register and disclose information, as well as the availability of specific private causes of action designed to protect investors in the statutes, is broad and vague. A second crucial area concerns the availability of private causes of actions to plaintiffs - investors allegedly harmed by false, misleading or incomplete statements in the purchase or sale of securities, and the burden of proof that they need to satisfy to prevail. The extension of the insider trading prohibition, another rule largely created by courts, is another area in which different ideological perspective might affect the decision-making process. Third, questions concerning the burden of proof that the SEC has to satisfy in order to establish a violation of the securities laws leaves room for interpretation. Fourth, cases addressing the role of the market for corporate control, of creating a leveled playing field for bidders and targets in takeovers, and litigation concerning the constitutionality of state anti-takeover statutes again calls on considerable interpretation of securities legislation by the Supreme Court. Finally, the Private Securities Litigation Reform Act of 1995, designed to curb frivolous securities law suits called for interpretation by the court.

It is this missing analysis of the relationship between securities legislation rulings of the Supreme Court and ideological, political and economic influences on these rulings that is our concern.

3. The Data

To address our problem statement, our data covers four distinct dimensions. The first records the voting behavior of supreme court justices in cases related to securities regulation. The second identifies measures relating to the ideological orientation of the justices. Finally we utilize one set of measures to represent the political climate in the USA, and another to control for prevailing economic conditions.

3.1. Court Data

A total of 49 Supreme Court decisions and the associated votes by individual justices were coded, from 1936 through 2011, a time span that covers almost the entire period in which the securities laws have been

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27 For a detailed discussion of the relevant literature and case law surrounding these examples see Fedderke and Venturuzzo (2013).
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The decisions of the court are coded as either in favour of investors or in favor of business, as a categorical variable. We denote the variable as \(ct\_business\), coded 1 for the pro-business rights outcome, providing the outcome measure of interest to the present study, with 423 individual votes cast by 42 justices.

Case selection reflects the most significant cases decided by the Supreme Court on securities laws in the sample period, and constitute the entire population of relevant decisions. A number of types of cases raise special considerations in coding. This is particularly true in two areas: takeovers regulation and insider trading. For instance, upholding anti-takeover statutes might be considered pro business, if hostile tender offers allow shareholders to realize a premium over market prices. On the other hand, some anti-takeover defenses can help the management to fend off takeovers that are not value-maximizing, and therefore to allow stronger protections of the corporate bastion can, at least in some situations, favor investors. Insider trading cases can be ambiguous since to allow some trading by insiders actually increases the informational efficiency of the market. We generally take the position that decisions favoring an active market for corporate control are favorable to investors. While in general the coding of cases was uncontroversial, in the small number of cases with ambiguity, it is reassuring to note that our coding is generally consistent with the Spaeth classification of Supreme Court decisions on the conservative to liberal spectrum, with conservative proxying for limited government regulation (pro-business) and liberal for expanded government regulation (pro-investor).

In Figure 1 we record the break down of decisions of the Supreme Court across those that are pro-investor and those that are pro-business) for our 49 coded cases, demonstrating the majority of decisions (59.18%) to be pro-business.

Figure 2 shows the distribution of decisions for and against investors under the Chief Justices whose courts ruled on the cases in our data base. While it appears that the rulings of more recent Courts have

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29 Our selection is validated by the significant average number of citations of the selected cases, and by the fact that most of them are excerpted or discussed in the major Securities Regulation casebooks, or referred to in leading manuals. We have also submitted the list of cases to securities regulation scholars and experts, who have confirmed that the selection covers the most important cases. As a robustness check of our results to the choice of cases included in the data set, we also conducted the analysis on a much more narrowly defined set of cases ruling on Securities Law. Instead of 423 decisions, this data set contained 162 votes by justices, though spread over much the same period (1936 through 2011). The results are symmetrical to those we report below - though the implied impact of ideological orientation of justices on the probability of voting against or for shareholder rights is much stronger in the smaller data set.


32 Available at http://scdb.wustl.edu/index.php

33 A detailed discussion of the legal considerations in the coding is available in Fedderke and Ventoruzzo (2013).

34 Note that as a consequence our sample does not suffer from the Priest-Klein (1984) problem: viz. that over time, since court would choose to review only finely balanced cases, the distribution of rulings in cases would come to settle roughly on a 50:50 ratio of pro-business and pro-shareholder rights decisions. In addition, since we use the votes of individual justices, the concern does not apply.
been more evenly distributed than earlier courts, it should be noted that only four cases were heard prior to 1970. Since then the Burger court was most prone to rule against investors, followed by the Roberts court, with the Rehnquist court being evenly split between pro-investors and pro-business rulings.35

3.2. Measures of Ideological Orientation of Justices

A number of alternative measures of ideological orientation of justices have been developed. Our study generated results on all the measures we could identify. However, since a number of the measures are essentially identical in informational content (see the explanation below), our reported results focus on three distinct measures: the party of the president nominating a justice; the Segal-Cover score of a justice; and the Martin-Quinn scores of a justice. A core innovation of our study, is the methodological treatment of endogeneity in the Martin-Quinn score (see below).

As a first measure of judges’ ideological orientation, we employ a categorical variable indicating the political party of the nominating president, denoted President, coded 1 for justices appointed by Republican presidents.

Advantages of this measure are that the variable is unambiguously exogenous to the voting behavior of the justices since nomination precedes voting on the Supreme Court, and reliable in the sense that there is no scope for inter-researcher ambiguity in the coding of the variable.36 There are also disadvantages. The variable lacks nuance, since not all Republican appointees are equally or even at all conservative, nor conversely all Democratic appointees equally liberal.37 This may arise in part since presidents may have motivations other than ideology in mind when making appointments,38 and because appointees may have their own strategic agendas that are only incompletely under the control of the appointing president. For that matter, not all presidents from either party are equally conservative or liberal.39 A additional concern with the use of the party of the appointing president as an indicator of judges’ ideology, is that presidents may not have complete or even extensive control over judicial appointments, making the presidential party a poor and potentially inaccurate proxy for judges’ ideology.40 Finally, and crucially, the ideology of judges is typically not invariant over time, but is subject to sometimes very substantial evolution.41 Particularly for long-serving members of the Supreme Court, this may be a particularly important source of error if the ideology of the judge is represented only by means of a variable capturing ideological stance at the point of

35 Without interpretation, note that dissents occur in a greater proportion of cases with pro-business decisions than in pro-shareholder decisions, with more than 50% of the cases with pro-business decisions having 3 or more dissents.
41 See Martin and Quinn (2007) and Segal et al (2007).
Despite the potential limitations of the President variable, Figure 3 illustrates that there is a plausible negative relationship between the proportion of votes cast by a justice against shareholder rights, and the economic liberalism of the appointing president of the justice - presidents with more liberal economic views thus appear to appoint justices that are more likely to vote in favour of shareholder rights, than in favour of business rights.\(^{42}\)

INSERT FIGURE 3 ABOUT HERE.

A second measure of the ideological views of judges that has been proposed in the literature is the Segal-Cover score,\(^{43}\) intended to address at least some of the shortcomings of the presidential party categorical variable. Segal-Cover scores are based on content-analysis of newspaper editorials covering the judicial appointees at the time of their nomination and confirmation hearings, and are constructed so as to measure how liberal (denoted \(L\)) a judge is. The score can be defined as:

\[
L = 1 - \frac{C}{T}, \quad 0 \leq L \leq 1
\]

where \(C\) denotes the paragraphs coded as indicating that the nominee is conservative, and \(T\) the total number of paragraphs devoted to the justice.

Advantages of the approach are again that the resultant score is unambiguously exogenous to the voting behavior of the judge in question, since it is constructed prior to the justice developing any voting track record on appointment. The literature suggests that the coding of individual judges tends to accord with the general perception of justices’ ideological position, and that they do not appear to be biased upward or downward in their ideology scores, suggesting a measure of reliability to the scores.\(^{44}\) Again there are also drawbacks. The assessment in the literature suggests that Segal-Cover scores provide a better guide as to judges’ ideology in contexts involving issues arising in the context of civil rights and liberties than federal taxation and federalism.\(^{45}\) Given the questions being posed by the present paper, this is of particular significance. Since newspaper coverage of appointees is neither uniformly detailed or rigorous, reliance on media coverage for the scoring is a potential source of error in the Segal-Cover scores.\(^{46}\) Finally, as for the nominating president categorical variable measure, since the Segal-Cover score is derived from newspaper coverage prior to appointment, it suffers from the same limitation of being static, as does the presidential party variable above, thus being unable to reflect the evolution of judges’ ideology over time.

\(^{42}\)The economic liberalism score is derived from Segal et al (2000).
\(^{43}\)See Segal and Cover (1989).
\(^{44}\)See Epstein et al (2011).
\(^{45}\)See Epstein and Mershom (1996).
\(^{46}\)There is an additional concern that the scores are available only for Supreme Court justices, and not for other courts. Since we are only concerned with Supreme Court decisions, this is not material for our study. See Epstein et al (2011).
The principal form of the Segal-Cover score used in this study, denoted Segal–Cover, conforms to the (1) definition.\textsuperscript{47} Despite the limitations of the Segal-Cover score, again there is a plausible negative association between the Segal – Cover variable and the proportion of votes cast by a justice against shareholder rights - justices with more liberal Segal – Cover scores are more likely to vote in favour of shareholder rights, than in favour of business rights - see Figure 4.

\textbf{INSERT FIGURE 4 ABOUT HERE.}

Various modifications have been proposed to address the short-comings of Segal-Cover scores. Epstein et al (2006) regress the Segal-Cover scores against DW-NOMINATE ideology scores for the appointing president, and employ the implied linear transform to obtain a modified Segal-Cover score (MSC).\textsuperscript{48} Cameron and Park (2009) extend the approach, by employing a set of five indicators on the prior track record of Supreme Court nominees,\textsuperscript{49} to construct a "best" available NOMINATE score (BNS).\textsuperscript{50} Cameron and Park also extract the first principal component from the MSC and BNS measures (Factor), which accounts for 85% of the variation in the two indicators, as well as providing a scaling of the factor into DW-NOMINATE space (NSP), effectively combining the DW-NOMINATE metric with contemporaneous media perceptions of nominees.\textsuperscript{51} In our empirical work, we considered all of these measures, as well as original Segal-Cover scores.\textsuperscript{52} However, since the correlation between the various Segal-Cover scores is uniformly high (always above 0.75, but generally above 0.85), the implication is that there is little unique informational content in the alternative Segal-Cover based measures. This is confirmed by the fact that the use of the alternative measures never generates qualitatively distinct results (statistically or substantively) from those we obtain for the Segal – Cover variable. For the sake of parsimony therefore, we restrict reported results to the measure conforming to (1).\textsuperscript{53}

Our third measure of justices’ ideology takes seriously the static limitation of the presidential party and Segal-Cover score approaches, both of which provide a measure of ideological orientation at the stage of appointment to the Supreme Court. Under this alternative approach, judges’ ideology is coded on the basis of the decisions that they support, directly reflecting the voting behavior of the justices. This is the approach

\textsuperscript{47} Derived from Segal and Cover, \textit{Perceived Qualifications and Ideology of Supreme Court Nominees 1937-2012}, http://www.stonybrook.edu/communs/polisci/jsegal/QualTable.pdf

\textsuperscript{48} The DW-NOMINATE scores locate members of congress in ideological space. See Lewis and Poole (2004) and Carroll et al (2009) on the construct.

\textsuperscript{49} These include DW-NOMINATE scores for justices that served as legislators in congress, for Chief Justice nominees the prior voting track record (as recorded by Martin Quinn ideal point estimates - see the discussion which follows), for nominees who served on the US Court of Appeals there are inferential scores based on related presidential and senatorial DW-NOMINATE scores (See Giles et al, 2001) and the DW-NOMINATE score of the proposing president.

\textsuperscript{50} The principle in construction is to use the most direct measure of prior track record, in preference to less direct measures. In effect, the ranking is from the first to the fifth information source detailed for the Cameron-Park approach.

\textsuperscript{51} The MSC, BNS, Factor, and NSP scores all impose a scale under which more liberal justices obtain a low score, more conservative justices a high score, thereby reversing the ordering under the Segal – Cover score.

\textsuperscript{52} See the discussion in Segal (2006).

\textsuperscript{53} There is one variable generated by Segal-Cover, that does diverge: the qualification score of the justices. There is no reason to suppose that qualification should have any systematic association with ideological stance, and for this reason we do not consider it in our study.
of the Martin and Quinn ideal point estimates of judges ideology, which generate measures that explicitly code the voting patterns of justices in decisions in which they rule. The scores vary over a > -7 (most liberal) to < +5 (most conservative) range. The immediate advantage of the Martin-Quinn scores is that they are dynamic, able to reflect changes in the views of judges over time, avoiding the static limitation of the President and Segal – Cover measures. These scores are also subject to replication, since they are based on observable votes, and in the view of the literature, tend to accord with general perceptions of justices’ ideological positions, giving some confidence in their reliability.

The obvious price that is paid for the improved dynamic properties of the Martin-Quinn scores, is that in any estimation that has the voting behavior of judges as the variable to be explained, the Martin-Quinn scores prove to be endogenous by construction, resulting in bias and inconsistency of the resultant parameters. One proposed resolution in the literature has been to remove the votes that are to be explained from the Martin-Quinn scores. However, this does not address the more fundamental problem that the endogeneity problem arises from a common latent variable that affects the voting behavior of judges across all classes of votes (a prospect that seems intuitively likely). Under this circumstance, correlation between the Martin-Quinn score and the error structure in estimation would continue to affect the reliability of estimation results. Generally in the literature the response has therefore been to use the exogenous measure of the ideological stance of the justices whenever estimating the impact of ideology on the voting patterns of justices, and to confine the Martin-Quinn scores to a representation of changing views of justices over time.

INSERT FIGURE 5 ABOUT HERE.

One of the core innovations of the present study is that we employ the Martin-Quinn ideal point estimates, denoted Martin – Quinn, but that we devise an instrumentation strategy to deal with the endogeneity problem. As for the presidential appointment, and the Segal-Cover scores, Figure 5 demonstrates an association between the Martin-Quinn ideal point measure of ideological orientation of justices, and the proportion of votes cast against shareholder rights - more conservative justices are more likely to vote against shareholder, and for business rights, than more liberal justices.

In the analytical results that follow below, our focus will be on the President, Segal – Cover and Martin – Quinn measures as the alternative measures of justices’ ideological orientation.

3.3. Measures of Political Context

To control for the political context in which decisions are made, we consider two distinct sets of variables.

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54 See Martin and Quinn (2002).
56 See for instance the discussion in Epstein et al (2011).
The first are derived from the Carroll et al (2013) DW-NOMINATE data set on roll call votes in the US House of Representatives (HoR) and Senate (Sen).\(^{58}\) We employ both the mid-point and spread measures of the two dimensions identified as the liberal-conservative orientation in the modern era (dimension 1), and the orientation on civil rights (dimension 2) of the house or senate.\(^{59}\) We denote the variables as HoR Dimension 1 Spread, HoR Dimension 1 MidPoint, HoR Dimension 2 Spread, HoR Dimension 2 MidPoint for the House of Representatives, and for the Senate as Sen Dimension 1 Spread, Sen Dimension 1 MidPoint, Sen Dimension 2 Spread, Sen Dimension 2 MidPoint.

The second set of variables consists of direct measures of party affiliation in the House of Representatives and the Senate. The first is defined as:

\[
V_{ane} = \frac{D - R}{D + R},
\]

where \(D\) denotes the number of Democrats, \(R\) the number of Republicans with seats. We define the measure for both the House of Representatives and the Senate. \(V_{ane}\) can be interpreted as a measure of the ideological direction of the House or Senate, and the strength of the ideological lean, with \(V_{ane} > 0\) indicating Democrat control, \(V_{ane} < 0\) Republican control, while \(V_{ane} \to 1\) indicates increased Democratic control, \(V_{ane} \to -1\) increasing Republican domination.\(^{60}\) We denote the two measures as HoR\_Vane and Sen\_Vane for the House of Representatives and Senate respectively.

Finally, we also employ a measure of polarization for the House of Representatives and the Senate. The polarization measure captures the extent to which the distribution of party representation in the house deviates from the 50:50 bipolar distribution representing maximal polarization, and hence intensity of conflict.\(^{61}\)

The measure is given by:

\[
RQ = S \sum_{i=1}^{2} \pi_i^2 (1 - \pi_i)
\]

with \(\pi_i\) defined as above,\(^{62}\) and \(S\) is a scaling factor. For the two party system of the US, \(RQ \to S\) as house representation becomes perfectly bi-polar (in favor of either party), and \(RQ \to 0\) as house representation becomes perfectly uni-polar (in favor of either party). We denote the two measures as HoR\_RQ and Sen\_RQ for the House of Representatives and Senate respectively.\(^{63}\)

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58See www.voteview.com/dwnomin.htm


60While there are also a very small number of House and Senate members who are not Democrats or Republicans, we control only for members of the two parties. This reflects the fact that US policy is an outcome of the two party system. Inclusion of other members of the two houses in any event hardly changes our measures, given their small numbers.


63In our estimations we also employed a measure of fractionalization for the House of Representatives and the Senate. The fractionalization measure captures the probability that two randomly chosen members of a house belong to the same party. The measure is given by \(\text{Frac} = 1 - \sum_{i=1}^{2} \pi_i^2\), where \(\pi_i\) denotes the proportion of total seats held by party \(i\), in our instance for the two party system of the US. As \(\text{Frac} \to 0\) the indication is of increased homogenization of the house, while \(\text{Frac} \to 1\) gives an indication of increased fractionalization in membership. For the origins of the measure see Taylor and Hudson (1972). The
3.4. Measures of Economic Context

To control for prevailing economic conditions, we consider five variables: inflation, the interest rate, the growth rate of real gross domestic product (GDP), the debt to GDP ratio, and the growth rate of the Dow Jones Index. The inflation rate measure was sourced from the Bureau of Labor Statistics; GDP data from the US Bureau of Economic Analysis; the public (domestic and foreign) debt to GDP ratio from Reinhart and Rogoff (2009); the Dow Jones index from the Federal Reserve Bank of St.Louis historical data series; a consistent historical long term interest rate series from Federal Reserve sources.

4. Estimation Methodology

In the empirical estimation section of the paper we confront two sets of related questions.

In the first, we estimate:

\[
ct_{business_{i,t}} = X_{i,t}\beta + Y_{i,t}\alpha + u_{i,t}
\]

where

\[
ct_{business_{i,t}} = \begin{cases} 
1 & \text{if a pro-business decision, with probability } \Pr(Y = 1) = P \\
0 & \text{if \# a pro-business decision, with probability } \Pr(Y = 0) = 1 - P 
\end{cases}
\]

with the vector of explanatory variables \(X_i\) for each justice \(i\), provided by President and Segal – Cover.64 The vector \(Y_{i,t}\) is provided by the set of political and economic conditioning variables included in our study. Our distributional assumption governing the error term is the logistic.65

A significant limitation that attaches to specification (4) is that all explanatory variables employed to capture the ideological stance of justices, are scored for a time point that corresponds to the nominations and appointments process, or earlier. Since this fails to allow for any variation in the views of judges over time, and given the average length of tenure of Supreme Court justices, measurement error in the ideology measures is therefore very likely.

For this reason we consider an extension to our baseline model. In this extension we reestimate specifications (4), but with the \(X_i\) for each justice \(i\) provided by the Martin-Quinn ideal point score, Martin – Quinn. Of course, this raises the immediate concern already noted in the literature that the Martin-Quinn measures

64 Recall that we also estimated with IdolScor, MSC, BNS, Factor and NSP, included in the \(X_i\) vector. Throughout, results conform to those obtained for the Segal – Cover variable for which we report results.

65 Hence the CDF is given by \(F_{ct_{business_{i,t}}} = \Pr(ct_{business} = 1|X,Y) = (\exp(X_i\beta + Y_{i,t}\alpha)) / (1 + \exp(X_i\beta + Y_{i,t}\alpha))\).
themselves represent a coding of the votes of the supreme court justices, rendering them endogenous to any specification such as (4), and hence biased and inconsistent. In our application the extent of the endogeneity problem is limited by the fact that the Martin-Quinn scores are based on all decisions taken by the justices, while \( ct \_business \) is based on a subset of the total number of decisions reached by the justices. However, this is only a partial resolution of the underlying problem.

We therefore pursue an instrumentation strategy. A legitimate instrumentation strategy requires one or more exogenous sources of variation in the measures of ideological orientation (here the Martin–Quinn measure), that are not also correlated with the error structure, \( u_{i,t} \), of (4). Since the measures of justices’ ideology other than the Martin–Quinn that we have identified for this study, are by construction exogenous to voting behavior, they present an immediate set of possible instruments for estimation purposes. These include the party of the president appointing the justice, as well as the range of Segal-Cover scores for the justices’ ideology described above. In addition, we explore whether out of the set of political and economic conditioning variables we are able to identify variables that are not associated with \( ct \_business \) but are associated with the Martin–Quinn ideal point score. We employ these measures as instrumental variables also.

Since instrumental variables do not readily generalize to the non-linear logit form, we estimate (4) under the probit-IV methodology rather than under logit, such that the distributional assumption regarding the error structure is the standard normal.\(^66\)

From specification (4) we derive the probability that a justice will vote in favour of business, and against investors, associated with specific values of the explanatory variables. Of course, coefficients are not immediately comparable across the alternative estimation specifications we employ, given that the implied probability values are conditional on the values of all the \( X_{i,t}, Y_{i,t} \), included in a specification, and across the logit and probit estimations on the distributional assumptions regarding error structure. For this reason, we conclude our results section by a consideration of the implied cumulative densities associated with the ranges of values of explanatory variables that we observe in our sample, conditioned on the mean values of all other variables in a given specification. We strive to give an indication of the upper and lower bound values of the CDFs that we estimate from our data.

5. Estimation Results

We proceed as follows. First we test for any impact of justices’ ideology, irrespective of broader social conditions. Sequentially measures of economic and political conditions are then included to test for the
robustness of any ideology impact on court rulings, and for the independent impact of economic and political conditions. Finally, we allow for the endogeneity for the theoretically most defensible measure of justices' ideology, the Martin – Quinn score, through an instrumentation strategy.

5.1. Baseline Model

We begin by a consideration of the (4) specification, under an \( \alpha = 0 \) restriction, and including the endogenous Martin – Quinn variable in the \( X_i \) vector.

Results are reported in Table 1, columns 1 through 3.

All ideology measures, with the exception of the Martin – Quinn measure are statistically significant at least at the 5% level.

The implication is that justices that are appointed by Republican presidents are more likely to deliver a pro-business ruling (see column (1) of Table 1), while more liberal justices as defined by the Segal – Cover score are less likely to provide a pro-business vote than conservative justices (see column (2) of Table 1). While the Martin – Quinn result is not statistically significant, it also implies that a higher conservatism score of justices is associated with a higher probability of justices casting pro-business rulings (see column (3) of Table 1).

Note, however, that the measures of ideology alone account for a small proportion of variation in voting behavior (below 1%), as measured by the pseudo-\( R^2 \) statistic.

In terms of predicting the voting behavior in financial market related cases therefore, the various measures of ideological orientation of judges carry the same implication: that more conservative judges, are more likely to vote in favour of business and against investors, than more liberal judges are (and the implied probability values are also very consistent - see section 5.3.).

One concern of the results of columns (1) through (3) might be that the associations are spurious, in the sense that the ideology measures may merely control for other factors that influence the Supreme Court, such as prevailing economic conditions at the time of a ruling. While unlikely, since all ideology measures other than the Martin-Quinn measure are time invariant and determined at the time of appointment of any given justice, we nonetheless examine the robustness of the association between the ideology of justices and their rulings by including measures of inflationary pressure, the interest rate, growth of real GDP, the Debt/GDP ratio and the growth rate of the Dow Jones index in the \( Y_i \) vector of specification (4).

Doing so allows us to also address the question of whether the rulings of the Supreme Court show systematic variation with changing economic conditions.

Results are reported in Table 1, columns 4 through 6.
Under inclusion of the measures of prevailing economic conditions, all measures of justices' ideological orientation prove statistically significant at least at the 5% level. This now includes the Martin–Quinn specification (column (6) of Table 1). Once again, moreover, the results indicate that regardless of the ideology measure employed, more conservative judges are more likely to deliver pro-business votes, than more liberal judges are.

Results also indicate that Supreme Court rulings are less likely to be pro-investor and more likely to be pro-business, under conditions of higher inflationary pressure, higher real GDP growth rates, higher public debt to GDP ratios, and lower growth rates in the Dow Jones stock market index. These findings are consistent across all specifications, in the case of inflation and real growth at the 1% level of significance, and for the debt and Dow Jones measures generally at the 5% level of significance.67

Inclusion of the economic variables increases the proportion of the voting behavior of justices accounted for (to approximately 17%), as measured by the pseudo-$R^2$ statistic.

Just as the economy may matter, so may Capitol Hill. Again, our concern here is to test the robustness of our findings on the ideology of justices to the inclusion of a range of measures of prevailing political conditions as described in section 3.3., and to investigate whether the Supreme Court rulings show any systematic variation across changing political conditions.

We do so by estimating specification (4) in which the $Y_t$ vector now includes the political condition measures of section 3.3..

Results are reported in Tables 1, columns 7 through 9, and Table 2.

Inclusion of measures of political conditions does not change our inference on the impact of the measures of justices ideology.

Consider the evidence of Table 1, columns 7 through 9, where the Carroll et al (2013) measures on the liberal-conservative orientation (dimension 1), and the orientation on civil rights (dimension 2) in mid-point and spread of the house or senate are controlled for. All ideology measures, with the exception of the Martin–Quinn measures are statistically significant at least at the 10% level. In addition in Table 2 we control for the measures of the ideological direction of the House or Senate, ($Vane$), and the polarization ($RQ$) of the two houses of Congress. Recall that $Vane > 0$ denotes a Democrat lean, $Vane < 0$ denotes a Republican lean; and any $dRQ > 0$ indicates greater polarization. Both the President and Segal–Cover measures remain statistically significant and at least at the 5% level By contrast, the Martin–Quinn score continues to return either relatively weak statistical significance, or insignificance.68

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67 Note that the one economic variable that is consistently statistically insignificant, is the interest rate measure.

68 Note that the spread and mid-point on the liberal-conservative orientation in the House of Representatives, the spread on the orientation on civil rights for African-Americans in the House of Representatives, and the Senate midpoint on the
Regardless of which political variables we condition on, results continue to indicate that regardless of the ideology measure employed, more conservative judges, are more likely to vote in favour of business and against investors, than more liberal judges are.

We also find that the measures of political conditions report systematic patterns of association with the likelihood of justices voting in favour of business or investors. Specifically, as the spread on the liberal-conservative orientation increases in the Senate, the probability of a pro-business vote increases. As the importance of civil rights issues rises in the Senate, by contrast, the probability of a ruling in favour of business decreases. An increasing spread on civil rights issues in the House of Representatives, lowers the probability of a pro-business ruling. These associations are consistently present, no matter what justice ideology measure is employed, and the significance level is consistently strong (generally 1%).

The lean as well as the polarization measures of the two houses of congress also show systematic patterns of association with the voting behavior of justices. More Democratic control of the House of Representatives is associated with a higher probability of justices ruling in favour of business (against investors), while for the Senate more Democratic control is associated with a diminished probability of pro-business rulings. Increased polarization of the House of Representatives is associated with a lower likelihood of pro-business votes, while increase polarization of the Senate raises the probability of a pro-business vote. It should be noted, however, that the statistical significance of the \( V_{ane} \) and \( RQ \) variables is less robust than that of the ideology scores, the economic variables, and the Carroll et al (2013) measures.

Inclusion of the Carroll et al (2013) measures raises the proportion of the voting behavior of justices accounted for to approximately 16% as measured by the pseudo-\( R^2 \) statistic, inclusion of the polarization measures raises this further to 25%.

The core of our findings do not alter when we control for both economic and political conditions simultaneously.

Results are reported in Table 3.

INSERT TABLE 3 ABOUT HERE.

First, the President and Segal – Cover justice ideology measures remain statistically significant, while the Martin – Quinn measure is both weakly and non-robustly significant. On all ideology measures the inference remains that more conservative judges, are more likely to vote in favour of business and against shareholder rights, than more liberal judges are.

Second, we continue to find that higher inflation, higher growth in real GDP, higher public debt to GDP ratios, and lower Dow Jones index growth rates lower the probability of a Supreme Court ruling in favour of investors (raise the probability of a pro-business decision).
Third, an increased spread on the liberal-conservative orientation in the Senate, an increase in the spread on civil rights issues in the Senate, a decreasing spread on civil rights issues in the House of Representatives, decreases in the polarization of the House of Representatives, and increased polarization in the Senate, all serve to lower the probability of Supreme Court rulings in favour of investors (raise the probability of a pro-business decision).

Controlling for measures of ideology, economic and political conditions simultaneously further raises the proportion of the voting behavior of justices accounted for, as measured by the pseudo-$R^2$ statistic, to the 30-40% range.

The implication of our baseline model is thus that the Supreme Court may not be immune to influences from economic and political conditions, nor from the ideological predispositions of justices in its rulings in connection with securities legislation.

5.2. Allowing for Endogeneity: Instrumentation Strategy

Thus far our estimation results have returned a consistent pattern: the President and Segal – Cover justice ideology measures are consistently statistically significant, and imply that more liberal justices have a greater propensity to vote in favour of investors, more conservative justices are more likely to protect business. By contrast, the Martin – Quinn measure while providing the same substantive inference, is generally insignificant. Such a finding is all the more disappointing since the Martin – Quinn measure is the only measure of ideology that allows to the evolution of justices’ views over time, and is hence most likely the most accurate measure of the personal views of the justices.

However, we did note from the outset that since the Martin – Quinn measure is based on the aggregate voting behavior of the justices on all cases (not just Securities cases), it is inherently endogenous to our (4) specification. We also suggested an instrumentation strategy that might be applied in the current context.

Since the presidential appointment and Segal-Cover ideology score measures are exogenous to the voting behavior of the justices by construct, a first set of valid instruments is provided by the presidential appointment measure, and the range of measures derived from the Segal-Cover work.

In the results on the impact of economic conditions, the interest rate measure was consistently statistically insignificant to the voting behavior of the court as a whole, while both the public debt to GDP ratio and the Dow Jones index growth rate showed relatively weak association. These measures provide our second set of instruments.

As a third set of instruments, we use the Carroll et al (2013) measures on the liberal-conservative orientation (dimension 1), and the orientation on civil rights for African-Americans (dimension 2) that are not statistically significant in the (4) specification. This includes the spread and mid-point on the liberal-
conservative orientation in the House of Representatives, the spread on the orientation on civil rights for African-Americans in the House of Representatives, and the Senate midpoint on the liberal-conservative orientation.

Results are reported in Table 4 for first and second stage regressions.69

INSERT TABLE 4 ABOUT HERE.

In the first stage regression (column (1)), both the President and Segal–Cover measures are statistically significant, and suggest that justices appointed by Republican presidents and with a conservative score on the Segal-Cover metric return a more conservative score on the Martin – Quinn measure. Moreover, both the interest rate and the spread on the Carroll et al (2013) measures on the liberal-conservative orientation of the House of Representatives are statistically significantly related to the Martin – Quinn measure.

The second stage regressions (columns (2) through (5)) revert to the specification of (4), and control not only for the instrumented form of the Martin – Quinn measure, but also the measures of economic and political conditions specified under the Yi vector of this study.70 Note that the Wald test of exogeneity of the instrumented variable, rejects the null of endogeneity, lending support to our instrumentation strategy.

Under the second stage IV-estimation, in contrast to the baseline regressions with or without the economic and political variables, the Martin – Quinn measure is now consistently statistically significant - and at the 1% level. The inference is again that more conservative justices are less likely to vote in favour of investors, and more likely to vote in favour of business. The implication is thus that the voting behavior of justices is thus at least in part determined by the ideology measure, rather than that the association is purely due to reverse causality.

Both economic and political dimensions also continue to report a statistically significant association with the voting behavior of justices.

Increased inflationary pressure and higher real growth are associated with a higher probability of justices voting against investors. Note however, that where the polarization of congress is controlled for, the significance and substantive size of the impact of the economic variables dissipates. Since the correlation between the economic variables and the political variables is low (uniformly below -0.42), it appears unlikely that the issue here is that the underlying social conditions that issue in expansionary economic activity (higher

69 Note that we tested the robustness of the results to a range of alternative specifications of the instrumental variables. This included use of all the ideology measures: President, Segal – Cover, MSC, BNS, Factor and NSP; specifications including only the ideology measures and the economic variables; only the ideology measures and political measures. All specifications return results entirely consistent with those reported below with respect to the Martin – Quinn measure. We report only the specification employing all instruments, so as to avoid possible omission of any possible additional determinant of justices’ voting behavior. Moreover, given the similarity between the various Segal-Cover measures, we continue to report results with only the President and Segal – Cover measures.

70 Since instrumental variables do not readily generalize to the non-linear logit form, recall that we estimate under the Probit-IV methodology rather than under logit. Hence the distributional assumption regarding the error structure is the standard normal, rather than the logistic.
inflation, higher growth) are also associated with higher fractionalization or polarization.

In terms of the political indicators, it is the spread on the liberal-conservative orientation (dimension 1) for the Senate, and the spread on the orientation on civil rights for the House of Representatives that remain statistically significant, with increased spreads for the Senate and house respectively leading to a lower and higher probability of shareholder rights being protected by the court ruling. House of Representative fractionalization or polarization continue to lead to a higher probability of pro-investor rulings, while in the Senate the impact is to lower the probability.

One important innovation of this paper is therefore a demonstration that there exist straightforward estimation methodologies that allow for the Martin-Quinn measures, that have the theoretically more plausible characteristic that the ideological position of justices may change over the course of their tenure, can be corrected for its inherent endogeneity in any specification that includes the voting behavior of justices as its dependent variable. We have shown both one plausible set of instruments, and a test for the validity of the instrumentation strategy. The increased statistical significance of the Martin-Quinn measure suggests that the strategy may be fruitful in further work exploring the voting behavior of justices.

5.3. The Probability Impacts

Our findings thus far do not detail the magnitude of the substantive impact of our explanatory variables on the probability of court rulings being against investors, or pro-business. Instead, our discussion has been focused on the statistical significance and direction of impact of the variables we have employed as our regressors, since under logit and probit estimation, coefficients are not immediately comparable across the alternative estimation specifications we employ, given that the implied probability values are conditional on the values of all the \( X_{i,t}, Y_{i,t} \), included in a specification, as well as on the distributional assumptions regarding error structure.

We therefore conclude our discussion of estimation results by commenting on the implications of our findings on the likelihood that the Supreme Court makes its rulings. In general, for each variable we distinguish between the implied cumulative density under parameter values that generate a "high" impact, and parameter values that generate a "low" impact,\(^{71}\) thus allowing for some degree of parameter uncertainty by indicating lower and upper bound values of the implied impact.

Since the dependent variable of our specifications are court rulings against shareholder rights, the probability values we report below are for rulings in favour of business rights.

\(^{71}\)While we do not necessarily choose the maximal or minimal impact (for reasons of general statistical quality of associated estimations), in virtually all instances the high and low estimates are in fact the implied extreme values.
5.3.1. The Ideology Measures

The general finding on the ideology scores is that justices appointed by Republican presidents, or who report more conservative ideology scores, are more prone to vote in favour of business, and against investors.

The CDFs of the ideology measures are reported in Figure 6 for the party of the appointing president, the Segal-Cover score, and the Martin-Quinn score respectively.

As already reported, justices appointed by Republican presidents are more prone to vote against investors, than those appointed by Democratic presidents. The difference is one of relative propensity, however. Justices appointed by Democratic presidents have a 55.78% probability of voting against investors. But the probability of a pro-business decision is even higher at 66.53% for those justices resulting from a Republican nomination. See Figure 6.

On the Segal-Cover measure, conservative justices return a low score (→ 0), liberal justices a high score (→ 1). A move from the most liberal to the most conservative justice, raises the probability of a pro-business vote from 51.90% (low estimate) or 53.48% (high estimate) to 67.27% (low) or 81.62% (high). While the change is comparable to that implied for the appointing president for the lower bound estimate, the aggregate change is much stronger for the upper bound estimate, derived from an estimation which also controls for economic and other political influences.

Of particular interest are the implied probability values for the Martin-Quinn measure, since this measure is the ideology measure that is most defensible on a priori grounds, in allowing changes in the views of justices over their tenure - which the other ideology measures do not. In addition, there is the added interest in determining the potential modulation of the implied impact under the Probit-IV estimator correcting for the inherent endogeneity of the Martin – Quinn variable. Our derived CDF under the Logit estimator (which does not correct for endogeneity) implies higher considerably probability values than the CDF derived under Probit-IV estimation, consistent with a weaker impact under the instrumentation strategy. Nonetheless the probability of a pro-business decision rises from 50.06% (Logit) or 33.05% (Probit-IV) for the most liberal justices (→ −7 on the Martin-Quinn scale) to 74.35% (Logit) or 60.05% (Probit-IV) for the most conservative justices (→ +5 on the Martin-Quinn scale).

Regardless of the ideology measure, the implication is that the voting behavior of Supreme Court justices varies systematically and substantively significantly with the ideology score.

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72 Given all the limitations of the President measure, here we only report the implied probabilities from one estimation (column (1) of Table 6) - note that the implied probabilities from the of the baseline estimation of column (1) of Table 4, returns virtually identical results.

73 Low and High estimates correspond to column (2) of Table 1, and column (4) of Table 3 respectively.

74 The Logit and Probit-IV results correspond to column (8) Table 2, and column (4) of Table 4 respectively.
5.3.2. The Measures of Economic Conditions

Under the measures of economic conditions, increasing inflation, growth and Debt/GDP ratios lead to increases in the probability of a pro-business, anti-investor ruling. By contrast, a rising growth rate of the Dow Jones index, increases the probability of a ruling in favour of investors.

Figure 7 reports the CDFs for inflation, real growth, the debt ratio and the Dow Jones measure respectively.

INSERT FIGURE 7 ABOUT HERE.

The pattern for the inflation, real growth and Debt/GDP ratio measures is symmetrical - for all three the probability of a pro-business and anti-investor decision rises to near certainty (→ 1) with increases in the economic measure, for both the "low" and the "high" impact derivations (note, however, that the probability values are derived for some relatively "extreme" values of the economic variables). What is more, for growth the implied probability values for the lower and upper bound estimates remain similar throughout the range of growth rates for which we consider the CDF. Differences between the upper and lower bounds estimates really only arise at low inflation or debt/GDP levels.

Thus for inflation, the probability of a pro-business rights decision is 16.25% (lower bound) or 41.08% (upper bound) as inflation approaches 0, rising to 1 as inflation exceeds 10%.

For growth, the probability of an anti-shareholder rights decision rises from approximately 50% as growth stalls entirely (0%), rising to above a 90% probability for growth above 6%. Of course, for a developed economy such as the US, such growth rates are rare, and for the average growth rate of 2.37%, the probability value lies at approximately 65%.

For low debt ratios, the probability of a pro-business rights decision falls to 36.80% (low parameter estimate) or 8.23% (high parameter estimate).

Finally, for the growth rate of the Dow Jones index, the probability of an anti-shareholder rights decision falls from 72.30% (low) or 82.11% (high) to 56.89% (low) or 38.78% (high), as the growth of the stock market accelerates.

The implication of these findings is that under expansionary conditions in the real economy (rising inflation, rising growth of GDP, rising public debt) the Supreme Court is more likely to rule in favour of business, and against investors. By contrast, a booming share market is more likely to result in rulings that protect investors.

Again, across all four measures of prevailing economic conditions, the implication is that Supreme Court justices' voting behavior varies systematically and substantively significantly with the economic measure.

For all economic impacts, the "lower" bound is supplied by column (5) of Table 1, the "upper" bound by column (4) of Table 3.
5.3.3. The Measures of Political Conditions

A total of seven measures of political conditions were found to be statistically significantly associated with the voting behavior of Supreme Court justices. These include the spread in the measure of both the House of Representatives’ and the Senate’s orientation on civil liberties; the spread on the Senate liberal-conservative orientation; the mid-point estimate of the Senate civil rights orientation; the lean in party representation for both the House of Representatives and the Senate; and the extent of fractionalization and polarization in party membership in both houses of Congress.

We are not sure why these patterns emerge from the data - merely that they consistently do so.

However, and without proof, one possible reason for this divergent pattern may relate to the distinct legislative functions of the two houses of Congress. At least traditionally the House is the source of legislative innovation, with the Senate providing an oversight and ratification function. The implication of our finding is that as the level of contestation in the House increases (rising polarization, increased spread of views on civil rights), or there is stronger Democrat control of the House, the Supreme Court is less willing to rule against investors and in favour of business. Under such contested political terrain or strong liberal representation, the court may simply be less willing to rule against investor interests, and in favour of business interests, perhaps in order to preserve public legitimacy, and to avoid offering diversionary targets for members of the House to mobilize around. By contrast, given the electoral cycles in Senate elections, and the procedural features
of Senate operations, contestation of the political terrain may not have the same populist implications, and instead raise the profile of lobby groups related to business interests. Definitive determination of why the divergent patterns are present, unfortunately lies beyond the scope of the present paper.

Nonetheless, we note again that the empirical results of our study suggest clearly that across a range of measures of prevailing political conditions, Supreme Court justice voting behavior shows systematic and statistically significant variation.

6. Conclusion

This paper examines whether the voting behavior of Supreme Court justices in 49 cases related to securities legislation since 1936, shows systematic variation in a range of measures of the personal ideological stance of the justices, a range of measures of prevailing economic conditions, and a range of measures of prevailing political conditions.

We find that the voting behavior does vary significantly with respect to all three: ideology, the economy, and politics.

More specifically, we find that more conservative justices (across a range of ideological measures) are more likely to vote against investors, and in favour of business, than are more liberal justices.

Under increasing inflation, increased real growth, and a rising public debt/GDP ratio, Supreme Court justices are more likely to favour business than investors. By contrast, a strongly performing stock market is more likely to be associated with Supreme Court rulings in favour of investors.

Finally, across a range of measures of contestation of the political space in Congress, we find a systematic statistically significant association with the voting behavior of Supreme Court justices. While beyond the scope of the present paper, we note that the impact of increased political contestation in the House and the Senate are distinct: in the House increased contestation raises the likelihood of justices ruling in favour of the protection of investors; in the Senate the effect is reversed.

The most fundamental implication is simply that the common adage that no person is an island unto themselves applies to Supreme Court justices ruling on securities legislation and shareholder rights as much as it applies to the generality of agents to which the adage is addressed.

References


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Are Justices of the US Supreme Court Islands Unto Themselves?


### Table 1: Estimation Results: Baseline 1

Figures in round parentheses denote standard errors. Figures in square parentheses denote probability values.

* denotes statistical significance at the 10%, ** at the 5% and *** at the 1% level. n denotes sample size.

<table>
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<th>Sample:</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
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<th>(8)</th>
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<tbody>
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<td>Constant</td>
<td>0.076137 (0.1748682)</td>
<td>0.7202577*** (0.1649706)</td>
<td>0.4367907*** (0.1015763)</td>
<td>-4.445068*** (1.546814)</td>
<td>-3.16768** (1.538362)</td>
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<td>President</td>
<td>0.5911974*** (0.2141524)</td>
<td>0.6016172** (0.2539451)</td>
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<td>Martin-Quinn</td>
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<td>0.0870539 (0.086568)</td>
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<td>0.510342*** (0.1035066)</td>
<td>0.501972** (0.1025479)</td>
<td>0.086557 (0.0685177)</td>
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<td>Interest Rate</td>
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<td>0.0864057 (0.0685177)</td>
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<td>Growth</td>
<td>0.3102063*** (0.0803993)</td>
<td>0.2676034*** (0.085458)</td>
<td>0.2763838*** (0.0870539)</td>
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<td>Debt/GDP</td>
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<td>0.0244898* (0.0134448)</td>
<td>0.0297505** (0.0133248)</td>
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<td>Dow Jones</td>
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<td>-0.0227377 (0.0108342)</td>
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<td>HoR Dimension 1 Spread</td>
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<td>3.396014 (2.385163)</td>
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<tr>
<td>HoR Dimension 2 Spread</td>
<td>-6.102453*** (1.515762)</td>
<td>-5.59125*** (1.580623)</td>
<td>-5.382229*** (1.57725)</td>
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<td>-3.803604 (3.236786)</td>
<td>-4.833812 (3.213707)</td>
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<tr>
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<td>14.83593*** (2.736761)</td>
<td>14.88989*** (2.737958)</td>
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<td>1.420747 (3.150746)</td>
<td>1.515807 (3.154206)</td>
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<td>5.5852111*** (2.737799)</td>
<td>5.050694** (2.64325)</td>
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<tr>
<td>Sen Dimension 2 MidPoint</td>
<td>-5.250065** (2.066376)</td>
<td>-6.053915*** (2.130683)</td>
<td>-5.829608*** (2.149681)</td>
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<td>423</td>
<td>415</td>
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<td>X²(1)</td>
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<td>4.44** (0.0352)</td>
<td>0.17 (0.6803)</td>
<td>53.70*** (0.0000)</td>
<td>60.45*** (0.0000)</td>
<td>61.53*** (0.0000)</td>
<td>54.49*** (0.0000)</td>
<td>51.70*** (0.0000)</td>
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<td>0.0079</td>
<td>0.0003</td>
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Table 2: Estimation Results: Baseline 2

Figures in round parentheses denote standard errors. Figures in square parentheses denote probability values.
* denotes statistical significance at the 10%, ** at the 5% and *** at the 1% level. n denotes sample size.

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<th>Logit (4)</th>
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<th>Logit (7)</th>
<th>Logit (8)</th>
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<td>-0.7938664*** (0.238088)</td>
<td>14.9498*** (4.982401)</td>
<td>15.03746* (8.664261)</td>
<td>0.098652 (0.1985642)</td>
<td>17.39633*** (5.558153)</td>
<td>15.41699 (9.849557)</td>
<td>-0.4082732** (0.1657751)</td>
<td>13.74363** (5.436374)</td>
<td>13.49787 (9.950707)</td>
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<tr>
<td>President</td>
<td>0.6355833*** (0.2365012)</td>
<td>0.5788816** (0.2394531)</td>
<td>0.5719942* (0.2413586)</td>
<td>-1.22776*** (0.3288661)</td>
<td>-1.169835*** (0.3362267)</td>
<td>-1.203316*** (0.3413549)</td>
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<tr>
<td>Segal-Cover</td>
<td>Martin Quinn</td>
<td>0.5580322*** (1.213094)</td>
<td>1.301476 (1.674611)</td>
<td>7.058688*** (1.237872)</td>
<td>2.031374 (1.716763)</td>
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<td>-1.298156 (1.899539)</td>
<td>-1.4201 (1.451595)</td>
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<td>Sen_Vane</td>
<td>HoR_RQ</td>
<td>-32.37375*** (3.991682)</td>
<td>-28.18594*** (6.482978)</td>
<td>-34.39109*** (4.084881)</td>
<td>-28.11919*** (6.595007)</td>
<td>-34.61576*** (4.106016)</td>
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Table 3: Controlling for Economic and Political Conditions

Figures in round parentheses denote standard errors. Figures in square parentheses denote probability values. * denotes statistical significance at the 10%, ** at the 5% and *** at the 1% level. n denotes sample size.

<table>
<thead>
<tr>
<th></th>
<th>Sample:</th>
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<td>0.2828693</td>
<td>0.6547024</td>
<td>0.2940419</td>
<td>0.0187704</td>
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Table 4: Results with Instrumental Variables.

Figures in round parentheses denote standard errors. Figures in square parentheses denote probability values.
*** denotes significance at the 1% level. ** denotes significance at the 5% level. * denotes significance at the 10% level.

n denotes sample size.

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<td>Constant</td>
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<tr>
<td>President</td>
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<tr>
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<td>(0.2211784)</td>
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<tr>
<td>Segal-Cover</td>
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<tr>
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<td>(0.3093489)</td>
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<tr>
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<td>Debt/GDP</td>
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<tr>
<td>Spread</td>
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<td>Wald of Exogeneity</td>
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Figures

Figure 1:

Distribution of Cases Across Pro-Business and Pro-Investor Holdings

Figure 2:

Distribution of Cases Across Pro-Business and Pro-Investor Holdings: Alternative Chief Justices
Figure 3:

Percentage Votes Pro-Business Against Appointing President Economic Liberalism Score

Figure 4:

Percentage Votes Pro-Business Against Justice Segal-Cover Score
Figure 5:

Percentage Votes Pro-Business Against Average Justice Martin-Quinn Score

- Axis labels:
  - Percentage Votes Pro-Business (Y-axis)
  - Martin-Quinn Score (X-axis)

- Graph includes data points for various justices, labeled with names:
  - Marshall
  - Stewart
  - Powell
  - Rehnquist
  - White
  - Burger
  - Scalia
  - Alito
  - Thomas
  - O'Connor
  - Souter
  - Breyer
  - Ginsburg
  - Sotomayor
  - John G.
  - Gores
  - Kagan
  - Minton

- The graph shows a positive correlation between the percentage of votes pro-business and the average Martin-Quinn score.
Figure 6: Probability Impact of Ideology Scores

President

Segal-Cover

Martin-Quinn
Figure 7: Probability Impact of Economic Variables
Figure 8: Probability Impact of Political Variables

- House of Representatives Civil Rights Orientation Spread
- Senate Liberal/Conservative Orientation Spread
- Senate Civil Rights Orientation Spread
- Senate Civil Rights Orientation Midpoint
- House of Representatives and Senate Orientation/Lean
- Polarization