

The Transmission of Legal Precedent Across the Australian State Supreme Courts Over the Twentieth Century

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This article considers several possible determinants of the transmission of legal precedent across Australian state supreme courts over the course of the twentieth century. The study finds that that the transmission of legal precedent is higher between State supreme courts that are more physically proximate and between state supreme courts in which a majority of judges in both courts are appointed by conservative governments. The study further finds that having an intermediate trial court and providing appointments to the High Court of Australia are correlated with whether a state is a source of interstate citations or a cue sender.

Gourts have derivative rather than primary authority (Friedman et al. 1981). As a consequence, courts justify their decisions by citing existing decisions in the same area of law. Some prior decisions are binding on the court. In Australia, as in other British Commonwealth countries, these are typically the court's own previous decisions and the decisions of courts that "stand above" the citing court and to which the litigants could seek leave to appeal. Decisions of other courts are not strictly binding and, as such, are of mere persuasive value. For state supreme courts, one such set of courts are the supreme courts of other states, which are situated in the same tier in the court hierarchy. Citations of the previous decisions of sister courts in other states is an important dimension of judicial communication (Harris 1982). However, communication between the state supreme courts is not symmetrical. Some state supreme courts are cue senders while others are cue receivers.

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In the face of complex issues and low levels of information, organizations seek simple preformed solutions (Cyert & March 1963). In searching for simple, preformed solutions to policy choices, organizations will take their cues from reliable sources (Matthews & Stimson 1975). There are several factors relevant to determining the strength of communication between sister courts. Among these, differences in state social ecology, defined as largescale social, economic, and demographic characteristics of states, affect communication between courts. If the policies of state supreme courts are adapted to socioeconomic conditions and if socioeconomic policies are reflected in intercourt communication, then communication should be greater when socioeconomic structures are similar (Harris 1985). The reputation of the cited court is also important. Courts with greater stocks of reputation capital will be regarded as more innovative and as more reliable sources of preformed solutions. Caldeira (1983, 1985) and Walker (1969, 1971) have shown that, in the United States, the relative reputation of the sender and receiver of the cue is one of the most important determinants of the flow of political information between appellate courts and legislatures, respectively.

The factors that explain the pattern of citations is important because flows of political information between sister courts can have dramatic consequences for public policies. Such information flows represent networks through which judicial innovations can be transmitted (Canon & Baum 1981) and through which the success and failure of policies can be communicated (Shapiro 1970). The basis of judicial communication can provide insights into political leadership among state courts (Caldeira 1985). States with more innovative courts also tend to have more innovative legislatures. This is because progressive state legal cultures spawn both innovative courts and legislatures. Legislators over time develop relatively well-articulated ideas about the propriety of certain jurisdictions as vantages for comparison in making new public policy (Walker 1969). Policies flow from states with more innovative courts and legislatures to states with less innovative courts and less innovative legislatures, so that the latter take their cue from the former (Harris 1985).

This article examines the determinants of the transmission of legal precedent across the Australian state supreme courts over the course of the twentieth century. It builds on a series of studies that have been published in this *Review* over the last quarter century that have examined the transmission of legal precedent between courts in the United States using either citation analysis or social network theory (see Bird & Smythe 2008; Harris 1985; Hume 2009; Johnson 1987; Walsh 1997). Among these studies, Johnson (1987) examines the vertical transmission of legal precedent from the higher to the lower courts, while Hume (2009), Bird and Smythe (2008), Walsh (1997), and Harris (1985) examine the diffusion of legal precedent across courts at the same level in the judiciary hierarchy. The latter three studies consider the diffusion of legal precedent across the state supreme courts in the United States and hence are closest in approach to this study. The present study also adds to the literature on the nature of the state supreme courts as legal institutions at a broader level, which has been the subject of several studies in this *Review* (see, e.g., Daniels 1988).

More generally, the article makes two contributions to the literature. One contribution is that it is the first to examine the determinants of the transmission of legal precedent among state supreme courts outside of the United States. It builds on a series of studies that have examined the determinants of the transmission of legal precedent across state supreme courts in the United States (Caldeira 1985, 1988; Harris 1982, 1985). A large literature exists that considers various aspects of judicial politics in the United States; however, little attempt has been made to examine whether the findings from this literature holds for courts in other countries. There are two reasons why studies of the transmission of legal precedent in the United States may not be generalizable. First, the U.S. courts are more politicized than courts in many common law countries, such as Australia, Canada, New Zealand, and the United Kingdom. In a comparative study of the U.S. Supreme Court, the High Court of Australia, and the Supreme Court of Canada, Weiden (2007) found that justices on the U.S. Supreme Court were more likely to engage in judicial activism compared with judges in the highest courts in Australia and Canada. Judicial appointments in the United States, via the U.S. Senate confirmation process, are highly politicized. Moreover, the judicial branch, as headed by the Supreme Court, is a national institution of policymaking, equivalent in status to the presidency, Senate, and U.S. House of Representatives. As noted by Shafer (1989), these are significant points of "American exceptionalism." This has at least two implications for the study of the transmission of legal precedent, compared with courts in countries with less politicized judiciaries. First, as discussed above, the transmission of legal precedent is a form of political communication. Hence, in the United States, there may be a greater role for the courts in the diffusion of policies across boundaries via the transmission of legal precedent, compared with courts in countries where courts are not as overt political actors. Second, if judges in the United States are more consciously concerned with policy outcomes than in countries with less politicized judiciaries, they will look more to activist courts to receive cues. Hence, in the United States there may be a more

prominent role for more activist courts to exercise political leadership, compared with countries with less politicized judiciaries.

A second reason why studies of the transmission of legal precedent in the United States may not be generalizable is that the operation of stare decisis differs from other federal structures, such as in Australia and Canada. Normally, U.S. state supreme courts are the final interpreters of state constitutions and state law, unless their interpretation itself presents a federal issue, in which case a decision may be appealed to the U.S. Supreme Court by way of a petition for writ of certiorari. Hence, while U.S. state supreme courts applying federal law are bound by decisions of the U.S. Supreme Court, federal court decisions on state law are not binding on state courts. This means that the state supreme courts retain a lot of independence from each other and that there is not an overriding final court of appeal at the national level, whose decisions are binding on the state courts on matters of state law. Friedman et al. (1981:801) wrote in terms of the "State supreme courts [regarding] themselves as siblings of a single legal family, speaking dialects of a common law language" in the United States; however, there is no single common law language as such. This fact may mean that there is greater divergence in the decisions of courts across state boundaries and that, counter to the point above about political considerations, less scope for the transmission of legal precedent across boundaries because there is no single common law.

The absence of broad-based empirical evidence for countries other than the United States has restricted attempts to build general cross-national theories of legal systems (Tate 1983). As a result, "most theory and data developed by social scientists for understanding legal systems still remain very much the product of, and thus bound to, the inevitable peculiarities of the U.S. context" (Atkins 1991:881). A study of the transmission of legal precedent across Australian state supreme courts can contribute to building general cross-national theories of how courts communicate and relate to each other for the following reasons. First, the Westminster system of government in Australia is representative of other major common law countries, such as Canada, New Zealand, and the United Kingdom. As discussed further below, most judicial appointments in Australia are apolitical and decisionmaking has been more compatible with strict legalism, at least at the state level. In this respect, Australia is much closer to the United Kingdom and other British Commonwealth countries than the United States. For example, Atkins (1991:882) states, "Scholars of English politics usually assume that courts do not participate in the process by which resources and values are allocated by the political system." Second, in Australia, the High Court of Australia (prior to 1986 it was the Judicial Committee of the Privy Council) is the final appellate court for state and Commonwealth matters as well as other constitutional provisions. This fact means that, as stated by the High Court of Australia in Lange v. Australian Broadcasting Commission (1997:563), "the common law as it exists throughout the Australian States and Territories is not fragmented into different systems of jurisprudence, possessing different content and subject to different authoritative interpretations." While the decisions of sister state supreme courts are not binding on each other, this potentially makes the transmission of legal precedent across state boundaries easier because precedents in sister jurisdictions are likely to be more relevant as a matter of law. In this respect, Australia is somewhat similar to Canada, where decisions of the Supreme Court of Canada (prior to 1949 it was the Judicial Committee of the Privy Council) are binding on the provincial appellate courts.

The second contribution is methodological in that we consider herein a complete matrix of all combinations of Australian states over a long time period. Existing studies for the state supreme courts in the United States have been deficient with respect to the spatial or time-series dimension of the analysis. Caldeira (1985, 1988) examines the determinants of the transmission of legal precedent between all 50 states and the District of Columbia in the United States, but his data are for a single year (1975). Harris (1982) has shown that variation in the rate of communication between state supreme courts has increased over time in the United States. Hence, Caldeira's (1985, 1988) analysis is potentially time bound. Harris (1982, 1985) examines the determinants of the transmission of legal precedent over a long time period (1870-1970), but his analysis is restricted to citations by a sample of 16 state supreme courts. As a result, he uses only a limited segment of the network (16×48) of such phenomena, which potentially creates a sample selection bias. A further limitation of Harris's (1985) study is that he uses methods more appropriate for cross-sectional data and, while he has a panel, he does not exploit the panel nature of the data to explore the time-series dimension.

The Australian Context

The Commonwealth of Australia consists of six states (New South Wales, Victoria, Tasmania, Queensland, South Australia, and Western Australia) and two territories (Australian Capital Territory and Northern Territory). Prior to Federation in 1901, the six states were self-governing colonies within the British Empire, while the two territories were not created until after Federation. The six state supreme courts pre-date Federation. The Supreme Court of New South Wales was established in 1814, the Supreme Court of Tasmania was established in 1824, the Supreme Court of South Australia was established in 1837, the Supreme Court of Victoria was established in 1852, the Supreme Court of Western Australia was established in 1861, and the Supreme Court of Queensland was established in 1863. While not considered as part of this study, the Northern Territory and the Australian Capital Territory have their own supreme courts, which were established in 1931 and 1934, respectively, and sit at the same level as the state supreme courts in the court hierarchy.

Prior to Federation, the only appeal from the state supreme courts was to the Judicial Committee of the Privy Council, which sat in London. However, because of the cost and time involved in travel to England, prior to the jet age this right of appeal was infrequently used (Malcolm 2001). Following Federation, the High Court of Australia was established in 1903, offering an alternative local avenue for appeal from decisions of the state supreme courts. Prior to 1984, unsuccessful litigants in civil matters had an automatic right to appeal to the High Court from the state supreme court of any state, subject to a monetary qualification. However, since the 1984 amendments to the Judiciary Act 1903 (Cth), prospective appellants have to obtain special leave to appeal to the High Court of Australia. Until the Australia Acts1 were passed in 1986, unsuccessful litigants in the state supreme courts could choose to appeal to either the High Court of Australia or the Privy Council, each of which functioned as an ultimate court of appeal. This created "a bizarre situation of dualism—and potential conflict -at the apex of the Australian hierarchy of courts" (Blackshield et al. 2001:563). The problem was that in different cases both ultimate courts might decide the same issue differently, giving rise to delicate issues of judicial comity and precedent. It also led to strategic game-playing, in which direct appeal to the Privy Council from a state supreme court "was a method of by-passing the High Court in cases where the prospects of success in that court were considered unfavourable" (Gleeson 2007:1234). This problem was resolved when appeals from the state supreme courts to the Privy Council were abolished by the Australia Acts in 1986, making the High Court of Australia the final court of appeal in Australia.

With the exception of Tasmania, the other states have intermediate general trial courts with civil and criminal jurisdiction, which sit below the state supreme courts and reduce the workload of the state supreme courts. These intermediate trial courts are

¹ The Australia (Request and Consent) Act (1985); the Australia Acts (Request) Act, passed by the Parliament of each state, and the Australia Act (1986) (U.K.).

known as district courts in New South Wales, Queensland, Western Australia, and South Australia, and the county court in Victoria. The county court/district courts in their current form date from 1967 (Queensland), 1968 (Victoria), 1969 (South Australia and Western Australia), and 1973 (New South Wales). However, there are earlier incarnations of these intermediate courts in some of the states. The Federal Court of Australia was established in 1977 to ease the workload of the state supreme courts and High Court of Australia. The Federal Court of Australia exercises concurrent jurisdiction with the state supreme courts under the Corporations Act, which covers a host of issues relevant to business from the winding up of companies through to orders available in relation to fundraising, corporate management, and misconduct of company officers. Anecdotal evidence suggests that much of the corporate litigation is now channeled through the Federal Court of Australia because of dissatisfaction with waiting times and list management in the state supreme courts.

Justices of the High Court of Australia are appointed by the Governor General on the recommendation of the Federal Cabinet (Section 71, Commonwealth Constitution). Judges of the state supreme courts are appointed by the respective state governor on the recommendation of the cabinet in that state. No judges in Australia are elected. The Attorney General, on behalf of the cabinet, would typically consult with the legal profession, but beyond this little is known about how judges are selected, and the practice appears to vary with each occupant of office (Winterton 1987). The two main political parties in Australia are the Liberal Party, which is right of center, and the Labor Party, which is to the left of center. The Liberal Party was only established in 1945, but it had conservative predecessors such as the United Australia Party. There have been few political appointments to the High Court of Australia. Sawer (1967:61) suggests that "the only appointments which were made with a fairly deliberate attempt to alter the composition of the court were those of Evatt and McTiernan by the Scullin Labor government in 1930." In the period since Sawer wrote, arguably another political appointment to the High Court was Lionel Murphy, by the Gough Whitlam Labor government in 1975. However, this is only three justices out of 53 justices appointed since 1903. As Winterton (1987:188) states: "Political appointments [to the High Court] (in the sense that a judge is appointed because of his or her political opinions, to satisfy party political pressures or to derive electoral advantage) have been rare in recent years." Moreover, at the state level, there have been few, if any, political appointments to the state supreme courts.

For much of the twentieth century, decisionmaking on the High Court of Australia was strongly influenced by the notion of "strict and complete legalism," most forcefully espoused by Sir Owen Dixon, who was a Justice of the Court from 1929 to 1952 and Chief Justice from 1952 to 1964. The composition of the High Court under Chief Justice Dixon reinforced a strict legalistic approach to decisionmaking. Fricke (1986:143-4) argues that throughout the 1950s and 1960s the Robert Menzies Liberal government appointed essentially nonpolitical "career barristers" who adopted Chief Justice Dixon's approach to decisionmaking. Sawer (1967:61) states that as a result, "the Court was mainly non-political." The High Court of Australia, under Sir Anthony Mason, who was Chief Justice from 1987 to 1995, gained a reputation for being more activist (see Pierce 2006); however, throughout the period studied, decisionmaking on the state supreme courts was primarily apolitical. The primary reason for this was that decisions of the state supreme courts have always been subject to judicial review by either the Judicial Committee of the Privy Council or the High Court of Australia, which has stymied any attempts by the state courts to adopt more overt approaches to policymaking.

Overview of Previous Studies

This study is related to at least five strands of literature in the legal and political science fields that have examined various aspects of communication between courts. The first is a series of empirical studies in law, beginning with Merryman (1954), which document different types of judicial citations and examine the reasons courts cite each other. A subset of this literature has focused on interstate citations (see, e.g., McCormick 1994; Smyth & Fausten 2008). This literature has documented patterns in citations, primarily in a descriptive manner. The present study is related to this literature in that it also uses interstate citations, but it goes further in that it systematically tests a series of hypotheses concerning the transmission of legal precedent, where the hypotheses are grounded in sociolegal contexts. The second strand of literature is a series of studies in law and political science that examine the determinants of the prestige of state supreme courts in the United States (Caldeira 1983; Choi et al. 2009; Comparato 2002; Mott 1936). These studies use citation metrics as proxies for the reputation of state supreme courts. Hence, these studies are not concerned with the determinants of transmission of legal precedent as such, but rather with why some courts are cited more than others.

A third strand of studies, to which this article is related, is a political science literature that has examined patterns of judicial activism across state supreme courts in the United States (Baum & Canon 1982; Glick 1971; Hagan 1988; Porter 1982). These studies

use judicial citations to identify activist state courts as cue senders. A fourth strand of literature, to which this article is related, and which is closely related to the third set of studies, is political science studies that have examined the diffusion of policies in specific areas of law across state supreme courts in the United States. Many of these studies have focused on the diffusion of tort law (Canon & Baum 1981; Lutz 1997; Shapiro 1965, 1970). Others have looked at the diffusion of policies in other areas of the law (Bird & Smythe 2008; Glick & Hays 1991). Both the third and fourth sets of studies use citation analysis to examine how specific laws-such as tort laws or wrongful-discharge laws-have diffused across state boundaries and how judicial activism influences these trends. These studies are interested in the take-up of specific laws in specific sociolegal contexts and not the transmission of legal precedent more generally. In this respect, the present study analyzes a broader set of citations.

The fifth strand of literature, to which this article is related, and the literature to which it is closest, is a small number of studies that have examined the determinants of the transmission of legal precedent more generally across state supreme courts in the United States. Caldeira (1985) examined the extent to which geographical distance, legal capital, social complexity, caseload, reputation, judicial professionalism, migration flows, and legal reporting region could explain differences in the transmission of legal precedent across state supreme courts in the United States, based on an analysis of interstate citations for 1975. Caldeira (1985) found that legal reporting regions, geographical distance between the courts, migration flows, and the reputation of the cited court were the most important determinants of the transmission of legal precedent. In a companion study, Caldeira (1988) applied clustering techniques to uncover consistent networks of state supreme courts and used discriminant analyses to study the determinants of groupings of state supreme courts. He found that courts in the same geographic region clustered together. Harris (1985) examined the transmission of legal precedent across state supreme courts in the United States based on data sampled from 16 state supreme courts at five-year intervals over the period 1870 to 1970. He examined the extent to which similar factors to those considered by Caldeira (1985) could explain the transmission of legal precedent and found that similar variables to those found by Caldeira (1985) were important, with migration flows being the most important determinant of the transmission of legal precedent after 1970. Harris (1982) used network analysis to show that over the course of the century studied (1870–1970), the trend in the pattern of citations moved from a hierarchy dominated by a few highprestige state supreme courts in the East, through a period of

widespread production of precedent and homogeneous communication, to a decentralized regional structure with diffuse centers of authority.

This article also contributes to the social science literature on Australian courts. Compared with the vast social science literature on courts in the United States, the social science literature on Australian courts is sparse and mainly restricted to the High Court of Australia and Federal Court of Australia. Several studies have examined institutional cohesion on the High Court of Australia (see, e.g., Narayan & Smyth 2005, 2007; Pierce 2008; Smyth 2001, 2002, 2003, 2004, 2005; Smyth & Narayan 2004; Wood 2001). Smyth (2000) tested the party capability hypothesis using data from the High Court. Other studies have analyzed the determinants of the prestige of individual judges on the Federal Court and High Court using citation analysis (Bhattacharya & Smyth 2001a; Smyth & Bhattacharya 2003a) or examined the relationship between aging and productivity on the Federal Court and High Court (Bhattacharya & Smyth 2001b; Smyth & Bhattacharya 2003b). Maitra and Smyth (2005) analyzed the determinants of retirement on the High Court. Pierce (2006) analyzed the institutional changes on the High Court under Chief Justice Mason from a political science perspective, while Weiden (2007) compared judicial activism on the High Court of Australia, the Supreme Court of Canada, and the U.S. Supreme Court using data from the 1990s. One study for Australian courts from a social science perspective that used data for a court other than the Federal Court or High Court is Smyth and Mishra (2009), who examined the factors influencing the decision of judges of the County Court of Victoria to publish their decisions.

To summarize, an extensive set of studies exist that examine the transmission of legal precedent and diffusion of policies in specific areas of law across state supreme courts in the United States. There are, however, no studies that examine the determinants of the transmission of legal precedent across state supreme courts in countries outside the United States, including Australia. This is a gap in the literature we seek to fill in this article.

Hypotheses

In his study of the transmission of legal precedent across state supreme courts in the United States, Caldeira (1985) formulated hypotheses concerning the relationship between the transmission of legal precedent and several other variables. These variables included (1) legal capital, proxied by the number of running feet of legal reports each state supreme court had produced from its inception until 1970; (2) socioeconomic diversity, proxied by the population of each state; (3) geographical distance, proxied by the distance between state capitals; (4) prestige of the cited court, proxied by an index based on citation counts; (5) judicial professionalism, proxied by whether the state of the cited court had an intermediate trial court, (6) caseload of the cited court, (7) cultural diversity, proxied by migration flows; and (8) whether the courts were in the same legal reporting region. The hypotheses, which we test here, are similar to those tested in Caldeira (1985) with some differences. Because we are using data over a century it was not possible to get data to test all the hypotheses considered by Caldeira (1985). To be specific, there are no reliable data on the size of caseloads or migration flows between states in Australia over the twentieth century. The other hypothesis we do not test that was considered by Caldeira (1985) is the legal reporting region. Decisions of the state supreme courts in Australia are not reported according to geographic region as they are in the United States, so this factor is not relevant. Finally, we also consider how ideological distance of the courts might affect the transmission of legal precedent, which is a factor that was not considered by Caldeira (1985). We now examine the hypothesized relationship between transmission of legal precedent and each of these variables.

Legal Capital

Legal capital refers to the stock of citable precedents or simply the number of cases a court has decided (Landes & Posner 1976). Legal capital is relevant to the transmission of legal precedent in two respects. First, if we assume that courts prefer to rely on their own prior decisions whenever possible (Shapiro 1972), the more legal capital that a court has the less it will need to borrow the legal precedent of its sister courts. Second, the larger the stock of legal precedent a state supreme court possesses, the higher the likelihood that it will be cited by the other state supreme courts (Caldeira 1983, 1985; Harris 1985).

H1: There is a positive relationship between the transmission of legal precedent and the ratio of cases reported of the cited court to cases reported of the citing court in a given year.

Socioeconomic Diversity

Socioeconomic diversity creates an environment conducive to complex litigation and new claims for rights that are catalysts for judicial innovation (Schwartz & Miller 1963). There will be a transmission of legal precedent from the more populous, industrialized, and urbanized states that have more innovative appellate courts, to the less populous, industrialized, and urbanized states. Caldeira (1985:186) summarizes the diffusion of innovation from more populous states to the less populous states as follows:

[W]e know that if and when a new issue comes to the fore, it most often arises in the most populous, diverse, industrialized localities. State supreme courts at work in more diverse milieus, possessing more cases of first impression, have the opportunity to contrive precedents that, if not always adopted intact, at the very least merit the rapt attention of jurists who follow in the wake. Or, in an alternative formulation of the relationship, supreme courts in the least modern should invoke the previous decisions of the benches in the more modern states ... parochials ... follow the cosmopolitans.

While industrialization and urbanization will increase the level of litigation by creating more complex interactions, population size represents the upper bound on the volume of litigation in a state (Caldeira 1985). Large populations translate into more litigation and, in turn, more "problematic" issues that require more innovative judicial solutions (Dahl & Tufte 1973). On the other hand, sparse populations reduce opportunities for judicial innovation (Canon & Baum 1981). Hence, population size is a good proxy for societal change within a state and the level of innovation in the decisions of its supreme court (Caldeira 1983, 1985).

H2: There is a positive correlation between the transmission of legal precedent and the ratio of population in the state of the cited court to the population of the state of the citing court.

Geographical Distance

Caldeira (1985) notes that geographers consider physical distance between individuals, organizations, and jurisdictions an important determinant of human behavior, but political scientists have paid less attention to geographical proximity. Political communication between neighbors is higher than between people in distant locales, partly because geographical closeness creates more opportunities for interaction and partly because neighbors are more likely to share a common set of economic and social traits. Caldeira (1985) suggests that if judicial behavior conforms to this social behavior, then state supreme courts will be more likely to cite the case law of their close neighbors.

H3: There is a negative correlation between the transmission of legal precedent and the physical distance between the state capitals of the citing court and the cited court.

Reputation of the Bench

The relative reputation of the bench of two state supreme courts might affect the transmission of legal precedent between those courts. State supreme courts that are regarded as having a strong bench are more likely to be cited by their sister courts. At the same time, courts with strong benches are more likely to cite their own decisions. It is difficult to come up with a precise measure of the reputation of a state supreme court at a particular point in time. In his U.S. study, Harris (1985:455) used dummy variables for California and New York, because these benches "have historically had a great deal of [reputation]," but this approach is unsatisfactory for two reasons. First, the choice of specific states is arbitrary and subjective. Second, reputation changes over time. Caldeira (1985) devised an index of prestige based on interstate citations received. This approach, however, is also not very satisfactory because the transmission of legal precedent is also measured in terms of interstate citations. Our indicator of the reputation of the bench of a state supreme court is the number of Justices of the High Court of Australia who were appointed from a given state in the relevant year. The High Court of Australia is the highest court to which Australians can be appointed (since the abolition of appeals to the Judicial Committee of the Privy Council). The states from which Justices of the High Court of Australia are appointed indicate the depth and quality of the bar, and thus the bench of the supreme court, in that state.

H4: There is a positive correlation between the extent to which a state supreme court is cited and the reputation of its bench, proxied by the number of High Court judges from that state.

Intermediate Trial Court

To create new and well-crafted precedents that are likely to be cited by judges on sister courts, judges require time and the type of cases that lend themselves to judicial innovation. The existence of an intermediate trial court assists to sift out a high proportion of "run of the mill" cases that are less likely to lend themselves to innovation and creates more time for appellate judges to invest in crafting their judgments (Atkins & Glick 1976). As the nature of the cases changes, judges become more fractious and opinionated, and courts show a greater preparedness to extend the frontiers of policymaking (Caldeira 1985). Courts that devise innovative solutions to socioeconomic problems are more likely to be cited.

H5: There is a positive correlation between the extent to which a state supreme court is cited and the existence of an intermediate trial court in that state.

Ideological Distance

If "conservatives" prefer the judgments of other "conservatives" and "liberals" prefer the judgments of other "liberals" (Landes et al. 1998), it is reasonable to expect that "conservative" courts would be more likely to cite other "conservative" courts and "liberal" courts more likely to cite other "liberal" courts. As a proxy for ideological distance we use the party affiliation of the government that appointed the judge. This follows the treatment of political ideology in previous studies of Australian courts (see, e.g., Smyth 2005). We use two measures of ideological distance to capture potential asymmetries in the manner that "conservative" and "liberal" courts behave. Labor is a dummy variable set equal to 1 if a majority of judges in the states of the cited and citing courts in a given year are appointed by a Labor government; 0 otherwise. Conservative is a dummy variable set equal to 1 if a majority of judges in the states of the cited and citing courts in a given year are appointed by a conservative government; 0 otherwise. This is not to say that judges appointed by Labor governments will be consciously activist in pursuing an agenda or that judges appointed by a conservative government will strictly apply black-letter law. Instead, judges appointed by governments of a particular political persuasion might be "like-thinking" and share the same values as other judges appointed by governments of the same political persuasion. There is less ideological distance between such judges and, hence, they may be more inclined to find support for their reasoning in each other's prior decisions and hence cite them more often.

Measurement of this variable is potentially problematic given that the cited precedents are not all from the observed year. This can be a problem if, for example, we have a Labor court at time t citing another Labor court at time t and if the precedent was actually decided by a court with a conservative majority at some point in the past. This, however, should not be a major problem when two issues are considered. First, the ideological composition of the court is generally slow to change because governments are in power for at least one term and often more, and the ability of governments to appoint judges is dependent on vacancies arising on the court. Second, Merryman (1954) was the first to observe that judicial citations exhibit a citation half-life in his study of the citation practice of the California Supreme Court. Similarly, previous studies have noted that the citation practice of the Australian state supreme courts display a citation half-life (see, e.g., Fausten et al. 2007). Put formally, the citation half-life is the statistical probability that citation of a case by the court is reduced by 50 percent every x years. The implication of a case having a citation half-life is that the probability that a case will be cited declines

exponentially as it gets older. Hence, most cases that are cited are actually fairly recent cases. There is likely to be a high correlation between ideological composition at time t and the time when the case cited was actually decided, particularly given that our cross-sectional observations are at decade intervals.

H6: There is an inverse relationship between ideological distance and the transmission of legal precedent. Courts with a majority of judges appointed by a conservative government are more likely to cite other courts with a majority of judges appointed by a conservative government. Courts with a majority of judges appointed by a Labor government are more likely to cite other courts with a majority with a majority of judges appointed by a Labor government are more likely to cite other courts with a majority of judges appointed by a Labor government.

Data and Methodology

We have data on the total number of times each Australian state supreme court cited each other state supreme court at decade intervals between 1905 and 2005. We employed a panel data model to estimate the correlation between the transmission of legal precedent between Australian state supreme courts and legal capital, socioeconomic diversity, geographical distance, ideological distance, whether the state of the cited court has an intermediate trial court, and the reputation of the bench of the cited court. As Australia has six states, the members of the panel are a matrix of the entire network of citations across the six states (6×5) , and the time dimension is each decade between 1905 and 2005 inclusive (T = 11). This generates a panel of 330 observations spread across 11 decades. As physical distance between state capitals is invariant with respect to time, it was not possible to estimate the coefficient, "physical distance" using a fixed-effects model; hence we used a random-effects model. Moreover, given the fact that the span of data was for a century, it would be unreasonable to assume that there are state-specific time-invariant effects present in the data.

The definition of each of the variables and descriptive statistics are provided in Table 1. The dependent variable, transmission of legal precedent, is the proportion of interstate citations by the citing court to the cited court as a proportion of the citing court's total interstate citations in a given year. For example, if the Supreme Court of New South Wales cites its sister courts 100 times in a given year, of which it cites the Supreme Court of Victoria 30 times, "NSW cites Victoria" is 0.30 for that year. Treating citations to a particular court (the cited court) as a proportion of total interstate citations by the citing court as our measure of the transmission of legal precedent follows the approach in Caldeira (1985) and has the advantage that it standardizes for differences in the usage of

Variable	Description	Mean	Std. Dev.	Min.	Max.
Transmission	Interstate citations by the citing court to the cited court as a proportion of the citing court's total interstate citations in a given	0.19	0.23	0	1
Legal Capital	year Ratio of cases reported of the cited court to cases reported of the	1.70	2.03		00 01
Distance	ctung court in a given year Distance between the state capitals of the citing and cited court (km.)	1,994.07	1,189.32	0.00	15.82
Population	Ratio of population in the state of the cited court to the population of	2.09	2.63	010	19 07
Reputation	Number of High Court judges in a given year from the state of the	1.06	1.47	0.0	10.01 B
Labor	A dummy variable set equal to 1 if a majority of judges in the states of the cited and citing courts are appointed by a Labor	18.79% of the	18.79% of the values were 1.	þ	D
Conservative	government; 0 otherwise. A dummy variable set equal to 1 if a majority of judges in the states of the cited and citing courts are appointed by a conservative	36.97% of the	36.97% of the values were 1.		
Intermediate	government; 0 otherwise. A dummy variable set equal to 1 if the cited court has an intermediate trial court; 0 otherwise.	77.27% of the	77.27% of the values were 1.		

interstate precedent across states. The data on interstate citations were collected by a team of research assistants who read each case reported in the official state reports of the six state supreme courts at decade intervals between 1905 and 2005 and recorded all citations to other state supreme courts. In total, there were 3,863 cases and 6,757 citations to previous decisions of other state supreme courts.

To measure legal capital, we used the ratio of cases reported of the cited court to cases reported of the citing court in the official state law reports of 1905-2005 at decade intervals. These data were collected by counting the number of reported decisions of each state supreme court over the relevant time period. To measure socioeconomic complexity, we used the ratio of population in the state of the cited court to the population of the state of the citing court. Data on population is from the Australian Bureau of Statistics (ABS 2008a). In robust checks reported below, we also used population born overseas and urbanization as proxies for socioeconomic diversity. The data sources are from the ABS (2008b, 2008c). To measure physical distance, we used the natural log of distance between the state capital cities. The source is http:// www.auinfo.com. We took the natural log of distance between capital cities because there is a big difference in scale between distance and the other variables. In these circumstances, the recommended course of action is to take the natural log of the variable to facilitate smoothing (Gujarati 1995). To measure the reputation of the bench in each state, we used the number of High Court of Australia Justices from the relevant state. Data on the number of High Court of Australia Justices from each state were collected by matching data from the Commonwealth Law Reports, the official law reports of the High Court of Australia, with information on state of residence contained in Evans (2001). Data on the existence of an intermediate trial court were collected from the Web sites of the state courts and Department of Justice in each state. Data on which judges were appointed by conservative and Labor governments were compiled by cross-checking the year in which each judge was appointed with whether the Australian Labor Party or a conservative political party was in office in the given state in that year.

Results

Descriptive Statistics on Citation Trends Over the Twentieth Century

We begin by examining the extent to which the state supreme courts cited each other over the course of the twentieth century. The results are presented in Table 2. In each of the first four decades of the twentieth century, interstate citations constituted less

	Interstate Citations	Total Citations to Judicial Authority	% of Interstate Authority
1905	49	1,235	4%
1915	27	863	3.12%
1925	37	1,507	2.46%
1935	96	2,201	4.36%
1945	200	2,388	8.38%
1955	221	3,488	6.34%
1965	328	4,620	7.10%
1975	544	6,920	7.86%
1985	1,186	12,869	9.22%
1995	2,020	14,080	14.35%
2005	2,049	14,368	14.26%

Table 2. Frequency of Interstate Citations by Decade (reported decisions of the state supreme courts of Australia, 1905–2005)

than 5 percent of total citations. In 1945, interstate citations increased to 8.4 percent of total citations and hovered between 5 and 10 percent of total citations up to, and including, 1985. The enactment of the Australia Acts in 1986 represents a structural break or turning point in judicial citation practice in Australia. Prior to the Australia Acts, the state supreme courts cited a high proportion of English cases. Since the Australia Acts there has been a sharp decline in the proportion of citations to decisions of English courts by the Australian state supreme courts. This trend has intensified following the enactment of the Human Rights Act 1998 (U.K.), which increased the influence of the European Convention of Human Rights and Fundamental Freedoms on English law, making English cases less relevant to Australia. In recent decades, citations of English authorities on the state supreme courts have been replaced by citations to decisions of the High Court and by citations to decisions of other state supreme courts. In 1995 and 2005, interstate citations jumped to just under 15 percent of total citations. Overall, Table 2 suggests that citations to the decisions of other state supreme courts represent an important share of the state supreme courts' total citations and that the share of interstate citations has increased in the period since World War II.

The aggregate figures in Table 2 mask considerable differences across state supreme courts. Not all state supreme courts were equally prepared to turn to their colleagues on coordinate benches as sources of inspiration or insight. Table 3 shows how the state supreme courts differed over the course of the twentieth century as consumers of persuasive precedent generated by their counterparts in other states. For most decades, the state supreme courts fell neatly into three categories. At one end of the spectrum, the Supreme Court of New South Wales and, to a lesser extent, the Supreme Court of Victoria were small consumers of interstate authority. The Supreme Court of New South Wales was the only

	VIC	NSW	QLD	WA	SA	TAS
1905	0.03%	3.79%	5.32%	4.81%	1.32%	13.91%
1915	2.30%	1.28%	11.71%	2.82%	0.00%	4.30%
1925	0.07%	0.47%	4.79%	1.32%	5.52%	0.00%
1935	1.59%	2.95%	10.74%	0.00%	6.82%	3.70%
1945	4.82%	3.98%	22.31%	14.29%	8.83%	21.33%
1955	7.17%	3.89%	9.20%	8.42%	6.40%	12.57%
1965	5.38%	3.74%	8.32%	6.69%	9.41%	15.40%
1975	7.96%	4.48%	12.86%	29.80%	11.98%	19.91%
1985	9.29%	4.88%	18.36%	17.06%	10.60%	15.77%
1995	12.69%	9.26%	15.52%	21.91%	16.16%	24.58%
2005	16.74%	8.95%	15.16%	17.69%	14.51%	30.69%
Average	6.19%	4.33%	12.21%	11.35%	8.32%	14.74%

Table 3. Citations to Interstate Authority as a Percentage of Total Judicial Citations by Each Court (reported decisions of the state supreme courts of Australia, 1905–2005)

state supreme court for which interstate citations represented less than 10 percent of total citations in each decade of the study. At the other end of the spectrum, the Supreme Court of Tasmania was a large consumer of interstate authority. In 2005, interstate citations represented just under one-third of all citations made by the Supreme Court of Tasmania. The Supreme Courts of Queensland, South Australia, and Western Australia were mid-range consumers of interstate authority, although there were isolated years in which these courts experienced a sharp but short-lived increase in the number of citations to their sister courts.

A natural extension of the results presented in Table 3 is to examine which courts are supplying interstate citations. The results are presented in Table 4. The findings are a virtual mirror image of the results presented in Table 3. Caldeira (1983) found that in the United States the relative position of state supreme courts as suppliers of interstate citations changed little over time. This is also true for the results presented here. The Supreme Court of New South Wales and Supreme Court of Victoria were the biggest suppliers of interstate citations in each decade under examination. In each decade of the study, these courts together supplied at least two-thirds of interstate citations, and in several decades this figure was as high as three-quarters or more of interstate citations. The Supreme Court of Tasmania was the smallest supplier of interstate citations. Over the entire study, it supplied on average just 2.2 percent of interstate citations. In eight of the 11 decades considered in the study, it supplied 3 percent or less of interstate citations and in only one decade did it supply in excess of 5 percent.

Table 5 characterizes the strength and direction of the relationship between dyads of state supreme courts. As expected, given that Victoria and New South Wales were large suppliers and small consumers of interstate citations, their ratio of citations supplied to

	VIC	NSW	QLD	WA	SA	TAS
1905	50.00%	26.00%	18.00%	0.00%	6.00%	0.00%
1915	33.33%	48.15%	11.11%	0.00%	3.70%	3.70%
1925	37.84%	59.46%	2.70%	0.00%	0.00%	0.00%
1935	51.04%	26.04%	7.29%	3.13%	11.46%	1.04%
1945	34.50%	38.00%	5.00%	9.00%	12.00%	1.50%
1955	35.75%	41.63%	6.79%	2.71%	10.86%	2.26%
1965	30.49%	40.85%	13.11%	2.74%	6.71%	6.10%
1975	31.46%	34.27%	18.35%	2.25%	10.11%	3.56%
1985	31.19%	35.05%	12.08%	5.40%	13.36%	3.00%
1995	21.85%	41.07%	14.78%	5.60%	14.78%	1.92%
2005	21.51%	44.71%	14.00%	7.57%	10.78%	1.43%
Average	34.45%	39.57%	11.20%	3.49%	9.07%	2.23%

Table 4. Citations of Specific Supreme Courts by Decade as a Percentage of All Interstate Citations (reported decisions of the state supreme courts of Australia, 1905–2005)

Table 5. Strength and Direction of Paired Relationships (reported decisions of
the state supreme courts of Australia, 1905–2005)

		Precedents cited from which state					
		VIC	NSW	QLD	WA	SA	TAS
Court Citing	VIC		1,023	274	92	167	41
0	NSW	726		278	135	160	54
	QLD	290	485		67	181	11
	ŴΑ	249	433	166		160	19
	SA	318	560	106	62		26
	TAS	162	184	79	19	96	

citations received was greater than one with respect to the four other states. Between these states, New South Wales was the cue sender and Victoria the cue receiver. At the opposite end of the spectrum to New South Wales and Victoria, for Tasmania and Western Australia the ratio of citations supplied to citations received was less than one with respect to each of the four other states, but equal to one with respect to each other. Queensland and South Australia sat in the middle. Both were cue senders with respect to Tasmania and Western Australia but were cue receivers from New South Wales and Victoria.

Results of the Panel Model

We turn now to examine the factors that explain these patterns. The results of the panel model with random effects are reported in Table 6. Dummy variables for time are excluded in Specification 1 and included in Specification 2. The results for Specifications 1 and 2 were similar, indicating that the model is robust to economy-wide time-varying effects (or shocks). The results were the same in terms of statistical significance of the variables, and the size of the coeffi-

Variable	Specification 1 Coefficient	Specification 2 Coefficient
Legal Capital	0.002	0.002
0 1	(0.35)	(0.35)
ln(Distance)	-0.108***	-0.109***
	(-3.96)	(-3.99)
Population	0.007	0.007
*	(1.07)	(0.97)
Reputation	0.037***	0.039***
*	(4.07)	(4.20)
Labor	0.006	-0.005
	(0.28)	(-0.20)
Conservative	0.032*	0.054**
	(1.66)	(2.22)
Intermediate	0.098***	0.096***
	(3.13)	(2.92)
Constant Term	0.849***	0.842***
	(4.13)	(4.06)
Time Dummies Included?	No	Yes
Regression Diagnostics		
R^2 (within) R^2 (between)	0.011	0.024
R_{a}^{2} (between)	0.627	0.641
R^2 (overall)	0.408	0.423
Wald χ^2 Test	72.37***	78.94***

Table 6. Results of the Panel Data Model (dependent variable is Transmission)

Values of z-statistics are in parentheses.

*, **, and *** denote significance at the 10%, 5%, and 1% level, respectively.

cients was also very close in the respective specifications. Before discussing the results for the hypotheses, we examine the issue of multicollinearity. Table 7 shows the correlation coefficients between each of the explanatory variables. Gujarati (1995) suggests a rule of thumb that if any pairwise correlation coefficient is in excess of 0.8, then multicollinearity is a serious problem. None of the pairwise correlation coefficients were in excess of 0.8. However, two pairwise correlation coefficients were in excess of 0.5 (Legal Capital/ Population and Population/Reputation), and this is potentially problematic. We also calculated the correlation coefficients year by year, and the above results were consistent for almost all years. Hence, dropping a few years off the data set and redoing the regressions would not make a difference. Greene (2002) suggests that one of the problems associated with multicollinearity is that the results are sensitive to the changes in specification; specifically, "small changes in the data produce wide swings in the parameter estimates" (Greene 2002:87). Hence, we re-estimated Specifications 1 and 2 in Table 6, dropping legal capital, reputation, and population in alternative models. The results for Specification 2, reported in Table 8, were similar in terms of sign and significance to those reported in Table 6. The results for the same exercise for Specification 1 were similar to those reported in Table 8, but we do not report them to conserve space. Overall, the results in Tables 7

	Legal Capital	ln (Distance)	Population	Reputation	Labor	Conservative	Intermediate
Legal Capital	1						
ln(Distance)	-0.13	1					
Population	0.65	-0.17	1				
Reputation	0.27	-0.18	0.53	1			
Labor	0.03	-0.01	0.05	0.02	1		
Conservative	-0.05	0.09	-0.03	-0.06	-0.37	1	
Intermediate	0.29	0.08	0.31	0.34	-0.09	0.19	1

Variables
Independent
for]
Matrix
Correlation
Table 7.

Variables	Specification (2) Legal Capital	Specification (2) Reputation	Specification (2) Population
Legal Capital		0.00116	0.00449
0 1		(0.218)	(0.870)
ln(Distance)	-0.110^{***}	-0.119***	-0.114^{***}
. ,	(-4.010)	(-2.557)	(-3.979)
Population	0.00793	0.0164*	
*	(1.239)	(1.804)	
Reputation	0.0386***		0.0391***
*	(4.188)		(4.398)
Labor	-0.00474	0.00177	-0.00406
	(-0.193)	(0.0769)	(-0.167)
Conservative	0.0531**	0.0505**	0.0547**
	(2.194)	(2.212)	(2.260)
Intermediate	0.0975***	0.0787**	0.0978***
	(2.986)	(2.235)	(2.955)
Constant Term	0.846***	0.933***	0.878***
	(4.094)	(2.666)	(4.085)
Time Dummies	YES	YES	YES
Observations	330	330	330
Number of Individual	30	30	30
$R_{\rm q}^2$ Overall	0.423	0.260	0.429
$R_{\rm g}^2$ Between	0.641	0.359	0.661
R^2 Within	0.0238	0.0449	0.0231

 Table 8. Results of the Panel Data Model Dropping Variables With High Correlation

Values of z-statistics are in parentheses.

*, **, and *** denote significance at the 10%, 5%, and 1% level, respectively.

and 8 suggest that multicollinearity was not a severe problem that was impairing the results.

In interpreting the results, we focus on Specification 2 in Table 6. There is support for H3. The coefficient on the natural log of distance was statistically significant at 1 percent with a negative sign. In the sample period, for each additional 1 percent in physical distance between state capitals, there was a 0.57 percent reduction (0.109/ 0.190) in the transmission of legal precedent between the state supreme courts of those states. If the barrier to transmission is the cost of communication, one might expect that geographical distance would be of more importance earlier in the period studied, compared with 1995 and 2005, when legal precedents were widely available on the Internet. To examine this conjecture, we re-estimated the model excluding 1995 and 2005 and re-estimated the model for only 1995 and 2005. In both cases the coefficient on geographical distance was negative and significant, but the size of the coefficient indicated that the importance of geographical distance declined slightly over time. For the period 1905 to 1985, for each additional 1 percent in physical distance between state capitals there was a 0.62 percent reduction in the transmission of legal precedent between the state supreme courts of those states. For the period 1995 and 2005, for each additional 1 percent in distance between state capitals, the corresponding reduction was 0.42 percent.

There is support for H4. The coefficient on reputation was significant at 1 percent. In the sample period, for a 1 percent increase in the number of High Court justices appointed from a particular state, there was a 0.22 percent increase $(0.039 \times 1.06/0.19)$ in citations to the state supreme court of that state by its sister courts. There is also support for H5. The coefficient on the dummy variable depicting whether a state has an intermediate trial court was positive and statistically significant at 1 percent. Citations to a state supreme court as a proportion of total interstate citations by its sister courts increased by 0.096, or 9.6 percent, when the state supreme court was located in a state with an intermediate trial court.

There is partial support for H6. There is support for the hypothesis that courts with a majority of judges appointed by a conservative government are more likely to cite other courts with a majority of judges appointed by a conservative government. However, there is no support for the hypothesis that courts with a majority of judges appointed by a Labor government are more likely to cite other courts with a majority of judges appointed by a Labor government. The coefficient on the conservative variable indicated that in pairs of state supreme courts in which the majority of judges in both courts were appointed by conservative governments, citations to each other's cases as a proportion of their total interstate citations increased by 0.054, or about 5 percent. An explanation why the coefficient on the Labor variable was statistically insignificant is that decisions of the state supreme courts are subject to appeal to the High Court of Australia and, for most of the twentieth century, were also subject to appeal to the Judicial Committee of the Privy Council. For much of the twentieth century, the High Court of Australia was a conservative political institution in which judicial decisionmaking was heavily influenced by the doctrine of strict and complete legalism. Hence, if judges appointed by Labor governments to state supreme courts did have progressive views, there was less opportunity for them to express their preferences in the form of progressive or overt policymaking. This is because progressive decisions, not supported by a strict interpretation of precedent, would very likely be appealed and overruled. This interpretation of the results is consistent with the often expressed view that the courts in Australia are not as politicized as in the United States (Sawer 1967), meaning that the judgments of Labor appointees exhibit a certain sameness with judgments of conservative appointees at least at the level of an intermediate appellate court, and both tend to be fairly conservative in disposition.

A limitation of the present study is that we do not have data on the field of law being examined. This is a limitation because, for example, if the Supreme Court of Victoria was considering a case on a particular legal issue and the only other state that had encountered that issue was Queensland, one would expect that the sister court being cited was Queensland and not, say, Western Australia. Existing studies for courts in the United States have found that political ideology is only important in certain areas of the law, such as civil rights and liberties. Meanwhile, political ideology is less important in mundane areas of the law, such as securities and tax (see Choi & Gulati 2008, and references cited therein). This is another reason why political influences may not be as evident in the state supreme courts in Australia compared with what extant studies suggest for the United States. Crime, estate, and family cases were a staple of the caseload of the state courts until the mid-1960s. It is conceivable that judges, at least Laborminded judges with progressive political views, do not have strong political preferences in run-of-the-mill areas of law such as these.

There is no support for H1. One explanation for why the coefficient on legal capital was statistically insignificant is that, as discussed above, legal capital has a citation half-life and depreciates over time. Seen in this context, it is likely that differences in the stock of legal capital across state supreme courts is not that important because most citations, including interstate citations, are to relatively recent decisions. There are several reasons for the decline in the citation power of precedent over time (Merryman 1954). First, later cases may be more relevant on the facts because the social context of earlier cases has changed. Second, the stock of older precedent will be reduced over time as earlier cases are overruled by later cases or statute. Third, legal opinion may have changed so that even if the earlier cases are not overruled, their reasoning may be regarded as less persuasive.

There is also no support for H2. Differences in population across states were not statistically correlated with the transmission of legal precedent across state supreme courts. This result is somewhat surprising because the state supreme courts of the two most populous states—Victoria and New South Wales—are big net suppliers of interstate citations to the less populous states. The explanation that has been offered for this phenomenon is that the state supreme courts in Victoria and New South Wales are the most innovative of the state supreme courts in the reasons they provide for their decisions (Smyth & Fausten 2008). Indeed, the Supreme Court of New South Wales has been likened to a "mini High Court [of Australia]" (McCormick 1994:291). One possible explanation for the coefficient on population differences being statistically insignificant is that the role of Victoria and New South Wales as suppliers of interstate citations is being captured by the variable depicting reputation of the bench. Throughout most of the twentieth century, the highest proportion of judges appointed to the High Court of Australia has been from New South Wales and Victoria.

Reputation and population had a correlation coefficient in excess of 0.5. To examine this issue further, we employed two alternative proxies to population for socioeconomic diversity: urbanization and population born overseas. The correlation coefficient between reputation and urbanization was 0.12, and the correlation coefficient between reputation and population born overseas was 0.01. Hence, the results with these proxies were not in any sense affected by multicollinearity. Urbanization and population born overseas are defined as:

Urbanization

 $= \frac{\% \text{ of population living in the capital city of the state of cited court}}{\% \text{ of population living in the capital city of the state of citing court}}$

Population born overseas

- $= \frac{\% \text{ of population born overseas in the state of cited court}}{\% \text{ of population born overseas in the state of citing court}}$

The results are presented in Table 9. Both urbanization and population born overseas were statistically insignificant, and the signs and significance of the other variables were unchanged. These results confirm that socioeconomic diversity is not correlated with the transmission of legal precedent across state supreme courts using three different proxies.

As a final robust check, we examined whether the results were being driven by New South Wales and Victoria, the two most populous states, which have the most legal capital and have supplied a disproportionate amount of interstate citations. In Table 10, we report results in which we excluded New South Wales and Victoria in alternative specifications. The results were very similar to the results for all the states reported in Specification 2 of Table 6. Hence, it is reasonable to conclude that the results were not being driven by one state.

Conclusion

The manner in which courts communicate with each other is important because flows of political information between sister courts provide an avenue for the transmission of public policies and provide insights into political leadership among state courts. To this point, existing studies have focused on the transmission of legal precedent across state supreme courts in the United States. The focus on the United States hinders attempts to build cross-

Variables	Specification (1) Urbanization	Specification (2) Born Overseas
Legal Capital	0.00445	0.00479
Legar Supra	(0.858)	(0.920)
ln(Distance)	- 0.113***	- 0.113***
()	(-4.029)	(-3.939)
Reputation	0.0403***	0.0388***
1	(4.535)	(4.344)
Labor	-0.00435	-0.00390
	(-0.178)	(-0.160)
Conservative	0.0546**	0.0548**
	(2.238)	(2.260)
Intermediate	0.0991***	0.0978***
	(2.798)	(2.950)
Urbanisation	-0.00156	
	(-0.0395)	
Born Overseas		-0.00847
		(-0.447)
Constant	0.875***	0.883***
	(4.044)	(4.086)
Time Dummies	YES	YES
Observations	330	330
Number of Individual	30	30
R^2 Overall	0.432	0.433
R^2 Between	0.667	0.670
R^2 Within	0.0225	0.0232

 Table 9. Results of the Panel Data Model Using Alternative Measures of Socioeconomic Diversity

Values of z-statistics are in parentheses.

** and *** denote significance at the 5% and 1% level, respectively.

Variables	Specification (2) VIC	Specification (3) NSW
	· · ·	
Legalcapital	0.00151	0.0103
1 (5)	(0.258)	(1.598)
ln(Distance)	-0.0495^{***}	- 0.0461**
	(-2.713)	(-2.571)
Population	-0.00419	0.0177**
	(-0.763)	(2.534)
Reputation	0.0782***	0.0264**
	(9.186)	(2.154)
Labor	0.0150	0.00789
	(0.573)	(0.285)
Conservative	0.0399	0.0683***
	(1.565)	(2.633)
Intermediate	0.0782***	0.0452*
	(3.319)	(1.710)
Constant Term	0.337**	0.310**
	(2.382)	(2.238)
Time Dummies	YES	YES
Observations	220	220
Number of Individual	20	20
R^2 Overall	0.519	0.371
R_{-}^{2} Between	0.912	0.740
R^2 Within	0.0613	0.0566

Table 10. Results for the Panel Data Model Dropping Either Victoria or NSW

Values of z-statistics are in parentheses.

*, **, and *** denote significance at the 10%, 5%, and 1% level, respectively.

national theories of judicial decisionmaking. In this study, we have used a random-effects panel model to examine the factors that influence the transmission of legal precedent across the Australian state supreme courts over the twentieth century. We find that the transmission of legal precedent is higher between state supreme courts that are more physically proximate and between state supreme courts in which a majority of judges in both courts are appointed by conservative governments. Some state supreme courts that exercise political leadership are sources of preformed solutions to new legal problems in their sister courts. We find that having an intermediate trial court and providing appointments to the High Court of Australia are important predictors for whether a state is a source of interstate citations or a cue sender.

In addition to examining the transmission of legal precedent across states for an important federal structure outside the United States, an advantage of the current study is that it uses a complete matrix of observations over a long time period. Examining the transmission of legal precedent over a long time, however, also has its disadvantages. The main disadvantage is that data on some potentially important predictors of the transmission of legal precedent, such as caseload and migration flows between states, are not available over the entire period. It should be said, though, that considering whether a state has an intermediate trial court is a rough proxy for caseload because one would expect that state supreme courts in states with an intermediate trial court would have a lower caseload. Future studies could examine the transmission of legal precedent over shorter periods using a richer set of variables.

A second direction for future research would be to use recent developments in network analysis to examine the structure of communication between the Australian state supreme courts in more detail. Harris (1982) and Caldeira (1988) represent relatively early attempts to pursue this line of research using data from the United States. Bird and Smythe (2008) is a more recent example that applies social network theory to examine the transmission of legal precedent across states, but again using data from the United States. A third direction of future research could be to look at the diffusion of policies across Australian states by focusing on specific areas of the law, such as employment law or tort law. This would allow for consideration of a much richer set of network variables. For example, a study that examines the diffusion of employment laws could consider the relevance of a wide range of economic variables, such as the labor force participation rate, union membership, and unemployment rate across Australian states (Bird & Smythe 2008).

While existing studies have focused on the interstate transmission of legal precedent, following the U.S. Supreme Court decisions in *Atkins v. Virginia* (2002), *Lawrence v. Texas* (2003), and *Roper v. Simmons* (2005), there has been much discussion about whether, and to what extent, courts in the United States should and do cite foreign law. The debate surrounding the use of foreign precedent in the U.S. Supreme Court has parallels in other common law countries. Smith (2006) notes, for example, that the Irish have been concerned about the encroachment of English law into their jurisprudence since at least the fourteenth century. The highest courts in several countries, including the Judicial Committee of the Privy Council, Indonesia, Italy, and Switzerland have expressed concern about the "imperialistic" offshore expansion of U.S. precedent (Smith 2006). Hence, a fourth direction for future research could be to examine the factors explaining the transmission of legal precedent across national boundaries.

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