THE PUZZLE OF CANADIAN LEGAL AID

by

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ABSTRACT

Provincial criminal legal aid programs vary significantly in terms of per capita and average costs. The purpose of this paper is to investigate factors that could potentially explain the differences in the relative costs of criminal legal aid among the provinces. The main factor considered is the type of service delivery model, which is determined according to whether services are provided mostly by private bar lawyers (judicare models), staff lawyers employed directly by the legal aid plan (staff models) or a mixture of the two (mixed models). One hypothesis is that the closer a service delivery model is to a staff model, the lower will be costs. The proximity of a legal aid program to a staff model is determined by the percentage of criminal legal aid cases referred to staff lawyers. Simple OLS regressions are run to test this hypothesis, which is not supported by the results.

Keywords: legal aid; private bar; staff lawyer; cost

To one of the best people I know, my Uncle Butch

ACKNOWLEDGEMENTS

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

1 INTRODUCTION

Criminal defense lawyers in British Columbia with 5 years of experience typically charge around $200 per hour. That is just the bottom end of the pay-scale; lawyers with more experience can charge up to $300-$500 per hour (Lawyers-BC.Com, 2004). With relatively high hourly legal fees, legal representation is an expensive endeavor for many Canadians. For Canadians living in poverty or those with low income and limited means, retaining a lawyer at these fees is likely not a feasible choice. There are two general theories for why we have legal aid. First, the stated aim of legal aid programs is to correct for this disparity by providing legal representation and access to the poorest members of society. Without legal aid programs, according to this theory, many poor Canadians with legal problems would be forced to rely on the generosity of lawyers engaging in pro-bono work, but would more likely appear in court unrepresented. The second theory is that a lack of representation would likely result in a bogged down court system. Hiring a lawyer for an unrepresented person may be less costly than the additional time an unrepresented person would take in the judicial process. Hence, legal aid may be supplied to mitigate the inefficiencies caused by unrepresented individuals in the judicial process, rather than simply a transfer of wealth to the poor. This result is largely unsubstantiated in the literature, but widely accepted. Legal aid may therefore be viewed in two different lights: as a transfer of wealth to the poor and as a mechanism to prevent the clogging-up of courts.

Either way, criminal legal aid is particularly important due to the adversarial nature of the justice system. Adversarial justice refers to the process of two parties opposing one another in a court of law or tribunal before a disinterested arbiter (Easton, Brantingham, & Brantingham, 1994). According to sections 7 and 11(d) of the Canadian Charter of Rights and Freedoms, all Canadians have the right to be presumed innocent, and the right not to be deprived of life, liberty, and security of the person, except as a result of a fair trial (National Council of Welfare, 1995). The Crown prosecutor with all

its resources, expertise, knowledge and skill against a poor, unrepresented individual accused of a criminal act is not a "fair" trial. With regards to this imbalance between the Crown and the accused, the Ontario Judges Association stated that: "Legal Aid is intended to bring some balance to the field" (Ministry of the Attorney General of Ontario, 1997, as cited in Tsoukalas & Roberts, 2002). Criminal legal aid is therefore an essential check and balance on the unbalanced power of the state over impoverished individuals who would otherwise be unable to have legal representation in criminal court (Legal Aid Ontario, 2001). Regardless of the reason, there is little doubt that criminal legal aid is important to the Canadian Justice system. However, no society wants to have justice at any price, and there is considerable variation in costs across provinces. This paper will concentrate on the relative cost differences among criminal legal aid programs in Canada.

As will be explained below, criminal legal aid programs differ greatly among the provinces. Although the funding of criminal legal aid is shared between the provincial and the federal governments, the administration of legal aid is a provincial responsibility and the provinces administer this aid differently. With high stakes for the involved parties (lawyers, clients, and the provincial and federal governments), it is not uncommon for legal aid programs to be the subject of much debate. Historically, one of the most hotly debated issues has been the type of service delivery model. Legal aid service delivery models can be classified into three types of programs: staff, judicare and mixed models. In staff models, legal aid is provided mostly by salaried staff lawyers who are employees of the program. Judicare models provide legal aid through private bar lawyers who are paid by the program according to a tariff of fees on a client-by-client basis. Mixed models contain significant elements of both the staff and judicare models by utilizing both staff and private bar lawyers. In reality, models are rarely 100% staff or judicare. Most contain at least some elements of both models. The type of service delivery model becomes particularly interesting when the relative cost of legal aid programs is considered.

Legal aid has become a particularly controversial issue in some provinces, such as British Columbia. Part of this controversy stems from the large growth in costs of legal aid. As a result, the Legal Services Society, which administers the British Columbia legal aid program, had its budget cut dramatically in 2002 because, according to the British Columbia Attorney General Geoff Plant, "It's simply not possible for British Columbia to

sustain the most expensive per capita legal aid program in Canada when we also have one of the weakest economies in the country" (Sorensen, 2002). The relative costliness of British Columbia's legal aid program is confirmed in Figure 1, which reports real per capita criminal legal aid direct[1] expenditures since 1983.

Figure 1:   Per Capita Criminal Direct Expenditures (real 1992 $)
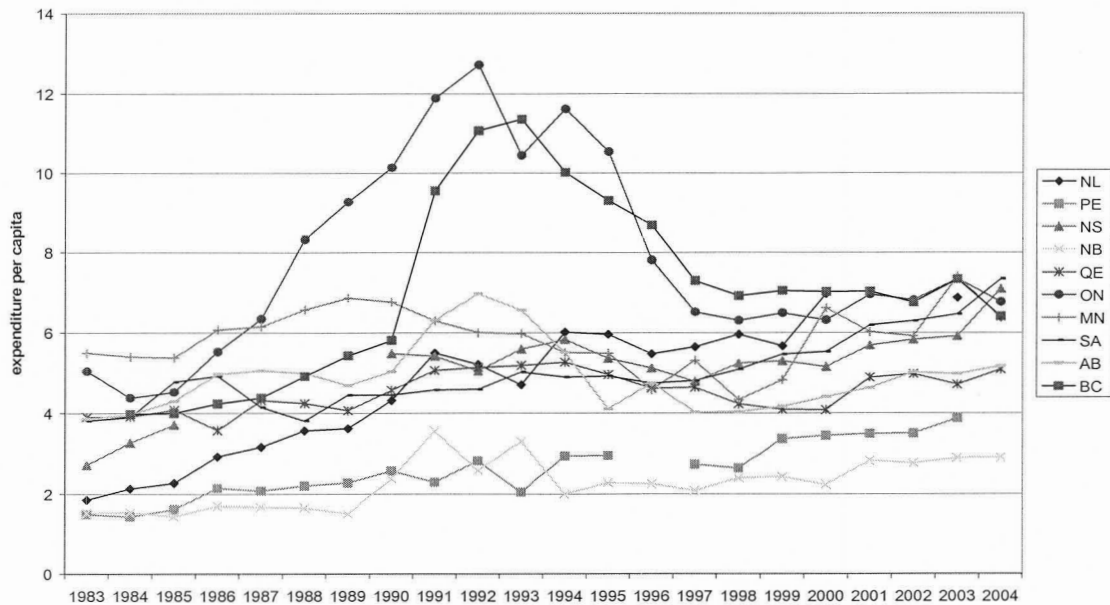
Figure 1 demonstrates that until the late 1990's, British Columbia and Ontario were dramatically out of line with the other provinces, with significantly higher per capita expenditures on legal aid in most years. While the other provinces displayed relatively gradual inclines over the years, per capita expenditure on criminal legal aid in both Ontario and British Columbia increased sharply from the late 1980's to the early to mid 1990's and then declined. British Columbia did have the most expensive per-capita legal aid program between 1996 and 2001. Another immediate observation is that the most expensive provinces are also the most populated and the least expensive provinces are the least populated. Intuitively, one would imagine that this ranking should be reversed if the

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[1] Direct expenditures are the sum of payments to private law firms and the costs of legal service delivery by Plan staff (including staff lawyers). Direct expenditures include funds spent on the provision of legal advice and representation services to clients including special target groups. Law office and community clinic expenses are included (i.e. staff salaries, benefits and overhead expenses. Other expenses and central administrative expenses are excluded.).

fixed costs for running legal aid programs were significant. The three most populated provinces, in descending order, are Ontario, Quebec, and British Columbia. As can be seen from Figure 1, for most years, British Columbia and Ontario were among the top three most expensive provinces. It can also be observed from Figure 1 that per capita expenditures on criminal legal aid are rising over time. The data in the graph are in constant 1992 dollars, so increases in spending cannot be attributed to inflation.

Per-capita expenditure is one measure of the relative costs of different provincial legal aid programs. Another measure to compare the relative costliness of legal aid programs is average direct expenditure[2], which is a proxy for average cost per case. Figure 2 displays average direct criminal expenditure for the provinces.

Figure 2:   Average Direct Criminal Expenditure (real 1992 $)
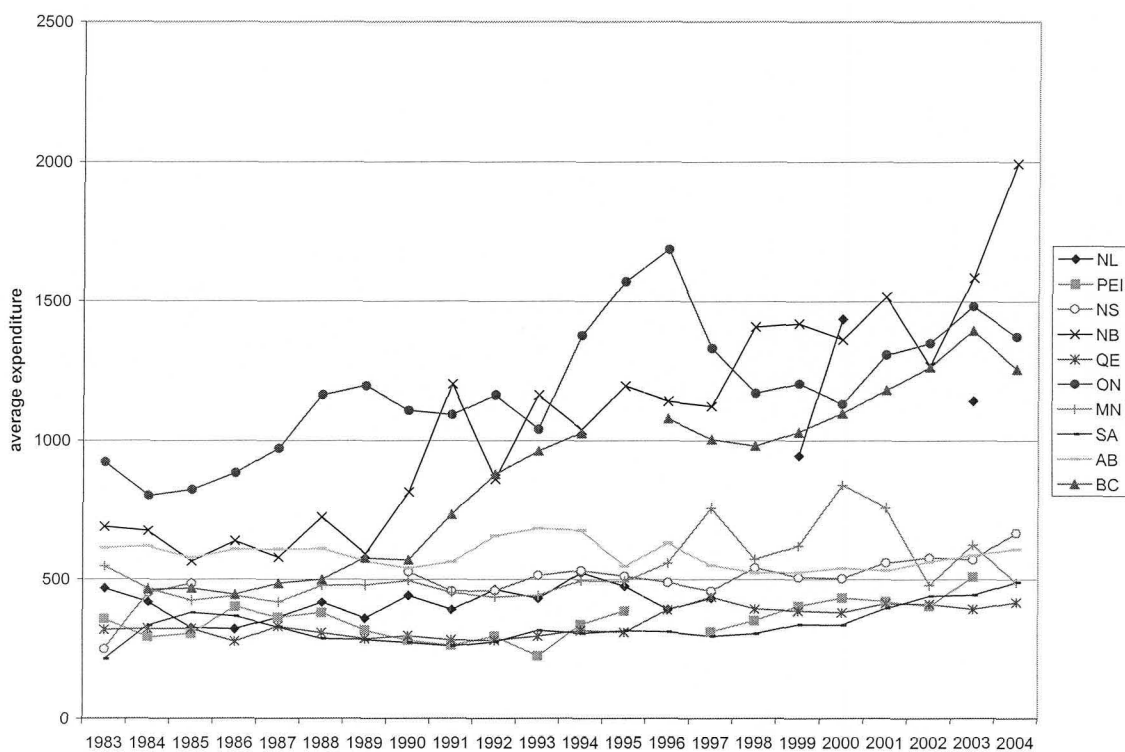
Again, there are striking differences among the provinces. Over the years, most of the provinces had relatively similar, stable average direct criminal expenditures and are in

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[2] Average direct criminal expenditure is derived by dividing direct criminal legal aid expenditure by the total number of approved criminal legal aid applications.

a tight pack hovering around the $500 horizontal line. On the other hand, British Columbia, New Brunswick, and Ontario have dramatically different trends. Ontario is significantly higher than most other provinces for all years, with a dramatic incline and a sharp fall between 1993 and 1998. British Columbia broke away from the pack in 1991 and costs rose steadily thereafter, with one slight dip between 1996 and 1998 and a decline between 2003 and 2004. New Brunswick experienced rapid, erratic growth of average direct criminal expenditure. All three have average costs that are significantly larger than the other provinces for most years. This trend for New Brunswick in Figure 2 is a surprise considering that Figure 1 demonstrates that New Brunswick was consistently among the two lowest cost provinces in terms of per capita direct criminal expenditure.

The relative cost differences of criminal legal aid among the provinces present a puzzle. Why do some provinces have relatively higher costs than others? The purpose of this paper is to investigate factors that can help to explain the puzzling differences in the relative costs of criminal legal aid among the provinces. One of the central factors that distinguish the various legal aid programs across Canada is the type of service delivery model. These service delivery models are defined according to the relative proportions of private bar and staff lawyers providing legal aid. One hypothesis is that the closer a legal aid program is to a staff model (the higher the proportion of cases referred to staff lawyers as opposed to private bar lawyers), the lower will be the costs of the program. This hypothesis is empirically tested in this paper. As will be explained below in greater detail, staff lawyers may provide services at relatively lower costs because they often spend less time per case than private lawyers and lack the incentive or the ability to over-bill for services. This hypothesis is reasonable given Figures 1 and 2. In Figure 1, the provinces that were out of line with the other provinces with much higher per-capita costs (British Columbia and Ontario) both use judicare service delivery models. In Figure 2, the provinces that predominantly employ staff criminal legal aid models (Saskatchewan, Newfoundland and Labrador, Prince Edward Island, and Nova Scotia) are consistently among the lowest cost provinces in terms of average cost while the most expensive provinces (British Columbia, Ontario, and New Brunswick) employ predominantly judicare systems . This paper makes a contribution to legal aid literature because it is the

first, to my knowledge, to use econometric analysis to investigate and model the relative costliness of criminal legal aid with respect to the type of service delivery model. Other papers and evaluations have been written concerning the costs of legal aid with respect to the different types of lawyers[3], but this is the first attempt to provide an econometric model of the costs using provincial-level aggregate data. Currently, there is no existing empirical model of the costs of legal aid to work from, so this paper will draw on previous studies and economic theory to systematically develop models of criminal legal aid costs.

The outline and organization of the paper is as follows. Following the introduction, section 2 provides background information on how legal aid is administered in Canada. Section 3 provides a brief literature review of past studies on the relative costs of legal aid. Following the literature review, section 4 outlines the incentives of staff lawyers, private bar lawyers, and the organization that governs the legal aid plan. Section 5 is the empirical component which estimates two different cost measures: average direct criminal legal aid real expenditures (a proxy for average cost) and per capita direct criminal real expenditure. Section 6 is a discussion of the results from the previous empirical section. Finally, concluding remarks are contained section 7. Appendices containing figures and tables from all sections are found after the conclusion.

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[3] For example, see Agg (1992), Easton, Brantingham & Brantingham (1994), and Currie (2000).

6

2 BACKGROUND

2.1 Funding

In Canada, the implementation of legal aid programs are provincial responsibilities and no two legal aid programs are exactly the same. Although the legal aid programs are organized and run by the individual provinces and territories, most of the program funding is shared by the provincial and federal governments.[4] For criminal legal aid (including young offender legal aid), funding is provided by the federal government to the provinces via cost-sharing agreements. Each province has its own cost-sharing agreement with the federal government although the same general formula to calculate the federal contribution is currently used for all provinces, regardless of the service delivery model employed (A. Currie, personal communication, November 7, 2006). From 1977 to 1990, the federal objective was to share criminal legal aid expenditures by contributing 50% of total "sharable expenditures" as defined in the cost-sharing agreements. Federal government contributions as a percentage of shareable expenditures did hover reasonably close to 50% until 1990, when the percentage began to drop. In the mid to late 1990's, the percentage of sharable expenditures funded by the federal government fell as low as 33%.[5] Federal contributions in the current cost-sharing agreements (which began around 2000) are determined in part by population (a per capita base), rather than defining a fixed share of allowable expenses, which was how previous agreements were designed (Department of Justice Canada, 2001). The Department of Justice Legal Aid Program Evaluation Report (2001) argued that the previous cost-sharing agreements were designed such that "provinces which spent more got more, regardless of the performance of their program, or its comparative cost-efficiency"(p.29). We can proxy the levels of federal contributions by dividing the federal government

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[4] Some provinces receive relatively small amounts of funding from other sources as well, including contributions from the legal profession and client contributions and cost recoveries.
[5] These percentages are for all of Canada

7

contributions to criminal legal aid programs by the total direct criminal expenditure for each province in each year. These results are displayed in Table 1 in the appendices.

Interestingly, the share of federal government contributions is considerably higher for New Brunswick than other provinces and considerably lower for British Columbia. These two provinces have had very different relationships with the federal government concerning funding. British Columbia had its criminal legal aid funding capped in 1990. As a result, federal contributions to criminal legal aid were flat-lined for ten years, rising only slightly in the last five years. The Atlantic provinces had up to 90% of sharable expenditures funded by the federal government when the federal-provincial cost sharing agreements were first implemented in the early 1970's. This high share to the Atlantic provinces was gradually reduced and eventually they were funded in the same manner as the other provinces. The other Atlantic Provinces funded their legal aid programs more substantially over the years, while New Brunswick did not. The federal share of funding has thus remained relatively high in New Brunswick (A. Currie, personal communication, November 7, 2006). British Columbia has historically had one of the most expensive criminal legal aid programs, both in terms of per capita costs and average costs. New Brunswick has been one of the most expensive provinces in terms of average costs, but has had some of the lowest per capita real expenditures for all years surveyed.

The federal government also indirectly funds legal aid for civil matters. Civil legal aid includes services for poverty law, family law, and immigration law. Federal contributions to civil legal aid are currently made through the Canada Health and Social Transfer (CHST), which replaced the Canada Assistance Plan (CAP) in 1996. Under CAP, civil legal aid was defined as an "item of special need" and federal contributions were calculated as 50% of eligible expenditures by the province on civil legal aid. Eligible expenditures were defined as expenditures on people eligible for social assistance. The current CHST is a block-fund transfer made to the provinces and territories to support health, post-secondary education, social assistance, and social services. The individual provinces and territories decide how to allocate the CHST among different social programs and there are no specific requirements as to how much funding should go to civil legal aid (Department of Justice Canada, 2001).

2.2 Classification of Legal Aid Service Delivery Models

The organization of legal aid programs differ in many respects, including the structural model of service delivery, coverage, and eligibility requirements. There are three main structural models for the delivery of legal aid in Canada: judicare, staff, and mixed. The judicare model is a fee-for-service system, where the legal aid plan contracts out to private lawyers under a fee structure called a tariff. In contrast, the staff model is one in which the legal aid plan directly employs a team of lawyers to provide legal aid services. Even within a pure staff system, private lawyers are sometimes used in certain circumstances, such as a conflict of interest or when a staff lawyer is unavailable. Finally, the mixed model is a hybrid of both the judicare and staff models, using both staff and private bar lawyers.

When services to different types of law are considered, the provincial classifications into the different models become blurry. All legal aid cases can be classified as criminal or civil. Criminal legal aid services are all legal aid services provided to eligible individuals who are being accused of or charged with a criminal offence. Civil legal aid services is an incredibly broad classification, including poverty law, family law, and immigration law. Mixed and judicare models often have strong staff model components in certain areas of law. For example, before legal aid services for poverty law were eliminated in British Columbia in 2002, legal aid poverty law services were administered mostly by staff lawyers (Legal Services Society, 2001). Even if a legal aid program is classified overall as a mixed model, it may well be much closer to a pure judicare model for criminal services (i.e. if almost all criminal cases are referred to the private bar while staff lawyers handle most of the poverty law services). For the purposes of this paper, the classification of legal aid models is made considering only criminal legal aid.

Legal aid service models for criminal law in the ten provinces (the territories-Yukon Territory, Northwest Territory, and Nunavut are excluded)[6] are classified as

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[6] The territories are excluded because the data for the Northwest Territory and Nunavut is patchy and Yukon aggregates approved criminal applications differently than the other provinces.

judicare, mixed, or staff for the years 1997-2004. The classification reflects the percentage of approved criminal legal aid applications that are referred to staff lawyers, as opposed to private bar lawyers. The percentage of approved legal aid applications that are handled by staff lawyers is calculated by dividing the total number of approved criminal legal aid applications referred to staff lawyers by the total number of approved criminal legal aid applications referred to both staff and private bar lawyers. Table 2, which is found in the appendices, illustrates this calculation for each of the provinces in each of the years. Looking at Table 2, some of the entries in the table immediately stand out. For example, the percentage of approved criminal legal aid applications referred to staff lawyers in New Brunswick did not rise above 1.02 percent until 2004 when it jumped to 58.61 percent. This dramatic jump is the result of many members of the private bar refusing to take legal aid applications in 2004 due to pay inequities between the criminal defense lawyers representing legal aid clients and the prosecutors (Toner, 2004). In British Columbia, the percentage of approved criminal legal aid applications referred to staff lawyers was between 15 and 17 percent until 2002, when it dropped to 3.55 percent. This drop is a result of the budget cuts in British Columbia which began in 2002. One way that British Columbia responded to having a significantly more limited budget was to let go of the majority of its staff lawyers (Sorensen, 2002).

There exists no formal method of classifying legal aid models. It is not always clear which category each province fits into. For example, while Legal Aid Alberta considers its program a mixed model, Statistics Canada classifies it as judicare because of the high proportion of direct legal expenditures directed to private bar lawyers (Statistics Canada 2006). In this paper, the models for criminal legal aid services will be classified according to the proportion of approved criminal legal aid cases referred to staff lawyers as opposed to private bar lawyers. I have classified the provinces in the following way: If the percentage of cases referred to staff lawyers is lower than 20 percent, the program is a judicare model. If the percentage of cases referred to staff lawyers is higher than 80 percent, the program is a staff model. If the percentage falls between 20 and 80 percent, the program is classified as a mixed model. Table 3 in the appendices illustrates this classification. The provinces that have staff programs over all years considered are Newfoundland and Labrador, Prince Edward Island, Nova Scotia and Saskatchewan.

Ontario, Alberta and British Columbia have judicare programs for all years included. New Brunswick is a judicare province for all years except for 2004, when it is considered a mixed model. Quebec uses a mixed service delivery model for all years surveyed. The criminal legal aid program in Manitoba is considered a judicare model for some years and a mixed model for others.

2.3   Coverage and Eligibility Restrictions

In order to obtain legal representation under a provincial legal aid plan, two requirements generally have to be met. First, the type of case must be covered under the legal aid plan. Second, the potential client has to pass an eligibility requirement which is a means test that requires a client's income to be below a certain level. Criminal legal aid plans throughout Canada vary greatly in terms of eligibility requirements and coverage.

Coverage for legal aid plans refers to which types of cases are eligible for representation in different provinces for both criminal and civil law. Coverage for criminal legal aid is far more uniform across the provinces than civil legal aid. This is a result of the federal-provincial cost-sharing agreements for criminal legal aid, which in part determine the minimum coverage requirements. This is not the case for civil legal aid, which is funded by the federal government through the CHST with no restrictions on how the funds are allocated. The general standard among the provinces is to provide criminal legal aid for cases that could result in sentences involving imprisonment or the loss of livelihood. In practice, this includes most indictable offences and many summary offences.[7] With regard to summary offences, the provinces have discretion in deciding which summary offences are likely to result in imprisonment (National Council of Welfare,1995). Coverage for civil legal aid can include family law, poverty law, and immigration law. Coverage for family law and poverty law issues varies greatly from province to province. For example, British Columbia provided extensive services for family law and poverty law before 2002. Since the funding cuts of 2002, representation for poverty law is no longer covered and representation for family law is only provided if

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[7] Indictable offences are the more serious offences and have higher penalties than summary offences.

certain conditions are met, including the existence of a threat of violence or the possibility of one partner taking the children out of the province (Sorenson, 2002; Legal Services Society, n.d.). Saskatchewan only provides civil legal aid services for family matters (Saskatchewan Legal Aid Commission, n.d.). Ontario does not require steep conditions such as a threat of violence to qualify for family legal aid and provides legal services for some poverty law issues such as employment insurance appeals (Legal Aid Ontario, n.d.). Table 4, which is included in the appendices, describes the coverage restrictions for criminal issues for all provinces.

Eligibility for legal aid refers to the means test that potential clients must pass in order to receive services. The potential client's income, assets, and family size are all taken into account. Financial eligibility requirements vary greatly between provinces. For example, a single person (family size of 1) must have net monthly income of less than $1,349 in British Columbia to qualify for legal aid (Legal Services Society, n.d.). The bar is even lower in Saskatchewan; a single person's net monthly income must be below $785 (Saskatchewan Legal Aid Commission, n.d.). Differences in eligibility requirements in part reflect differences in the cost of living among provinces. Legal aid plans also typically take other factors into account for eligibility, including legal merit, urgency, cost of proceedings, probability of winning the case, and the history of the client (Statistics Canada, 2006). Legal aid also may encompass more than just the provision of services to a client free of charge. For example, Manitoba offers legal aid where the client pays none of the costs ("Fully Eligible"), or some of the costs ("Agreement to Pay") or all of the costs ("Expanded Eligibility") with the financial eligibility requirements becoming steeper as clients have to pay less. Under the expanded eligibility option in Manitoba, Legal Aid Manitoba initially pays the legal fees and the client pays Legal Aid Manitoba back in monthly interest-free installments. In order to quality for this option, a single person must have a net yearly income of less than $23,000 (Legal Aid Manitoba, n.d.). Including this type of option is beneficial because it allows a significant portion of society with relatively lower incomes to benefit from some form of legal aid whereas they would have not qualified if only full coverage was offered. Table 5, which describes the eligibility restrictions for all provinces, is included in the appendices.

3 PAST STUDIES

The type of service delivery model for legal aid has historically been and continues to be a fiercely debated topic. Many past studies have focused on both the relative cost differences between staff and private bar lawyers and differences in quality of service. One general finding, which will be further explored below, is that staff lawyers tend to provide services at lower costs than private bar lawyers. However, proponents of judicare systems have argued that although staff lawyers tend to provide less expensive services, the services provided are inferior to those provided by private bar lawyers. In particular, it is often argued that the staff model is less expensive because staff lawyers spend less time per case, deal with less complex cases, and are not independent of the courts. Past research, including the Burnaby Public Defender Study, the Manitoba Evaluation, and Alberta Youth Staff Lawyer project, can help shed light on these issues. Within predominantly judicare systems, other types of experiments, such as contracting out to private law firms, have been undertaken to find ways to reduce the costs of private bar lawyers. Contracting out to private law firms and allowing them to bid on blocks of cases is an alternative to all other types of service delivery models. Two notable contracting experiments took place in Manitoba and British Columbia.[8]

3.1   Staff vs. Private Lawyer Studies

3.1.1   The Burnaby Public Defender Study

Brantingham's (1981) Burnaby Public Defender Study was the first to compare the relative costs of staff and private bar lawyers. The results of the study were that the average cost of staff lawyer cases was $235 compared to $225 for Burnaby private bar lawyers and $264 for Vancouver private bar lawyers. However, about 20% of staff

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[8] All studies are summarized by Currie (2000) in Legal Aid Delivery Models in Canada, Past Experience and Future Developments.

lawyers' time was spent on duty counsel, which made their average cost artificially high. It was estimated that staff lawyers could have increased their caseload by approximately 14% without duty counsel work, and if only 4 extra cases could be taken per month, the average cost of a staff lawyer would fall to $192.[9] Overall, it was found that clients tended to be convicted about 60% of the time for both staff and private bar lawyers. However, 40% of clients who were defended by private bar lawyers were sentenced to jail, while only about 30% of clients defended by staff lawyers received jail sentences. It was also found that staff lawyers tended to plead clients guilty more often, but with no significant effect on the outcome. With regards to the accusation that cost differences could be attributed to the tendency for staff lawyers to handle less complex cases, the Burnaby study inadvertently controlled for this issue. All cases were assigned to a staff office, regardless of complexity, until the workload optimum was reached and the staff office would no longer accept cases. The remaining cases were referred to the private bar. The study concluded that public defense system (staff model) would be less expensive than the judicare model because staff lawyers could deliver legal aid at lower costs than private bar lawyers with similar quality of service (as cited in Currie, 2000).

3.1.2 The Manitoba Evaluation of 1987

In Manitoba, it was found that the overall cost per case of staff lawyers was $197, compared to $307 for private bar lawyers. This study controlled for complexity of cases by further analyzing costs in terms of quartile thresholds of the caseload. For the first 25% of their caseloads, staff lawyers had an average cost of $48, compared to $201 for private bar lawyers. For the lower 50% of cases, staff lawyers had an average cost of $100, while private lawyers' average costs were $236. For the lower 75%, average costs for staff and private bar lawyers, were $241 and $310, respectively. It was also found that staff lawyers tended to spend less time per case than their private counterparts. For example, for assault cases, staff lawyers spent an average of 3.9 hours per case, while private bar lawyers spent an average of 8.2 hours. For both private bar and staff lawyers, represented clients were convicted approximately 72% of the time, but only 12% of

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[9] Duty counsel refers to lawyers assisting people who have to appear in court but are not formally represented. They mainly inform the accused of the judicial proceedings and provide advice.

clients represented by staff lawyers were sentenced to jail, while 23% of clients represented by private bar lawyers were imprisoned. The Manitoba evaluation also found that staff lawyers spent less time per case than private bar lawyers, regardless of the plea, sentence, or disposition (Sloan, 1987, as cited in Currie, 2000).

3.1.3   The Alberta Youth Staff Lawyer Project

The Alberta Legal Aid Society launched a three year pilot project in 1993 to test the effectiveness of staff lawyer clinics in the delivery of legal aid to young offenders. Clinics were established in Calgary and Edmonton. It was estimated that costs for private bar lawyers were 30% higher than for staff lawyers. Staff lawyers working in the clinics not only provided legal representation, but also provided duty counsel services. These duty counsel services were estimated to have saved Alberta $2.4 million over the course of the project because it was estimated that with this duty counsel service, about 4800 less certificates (for legal representation) were issued. The pilot project concluded that compared to private bar lawyers, staff lawyers were more effective at resolving issues early in the judicial process, which reduced costs drastically. With regards to differences in case outcomes, staff lawyers in the Calgary office did not show statistically significant variation in disposition or sentencing compared to private bar lawyers. However, in Edmonton, staff lawyers tended to produce better sentences for their clients. The Evaluation of the Alberta youth staff lawyer project also had detailed data on guilty pleas. Specifically, it was found that staff lawyers tended to plead clients guilty before the trial date much more often than private bar lawyers. Private lawyers pleaded clients guilty before the trial and on the date of the trial with about the same frequency. The data suggests that these different tendencies had no significant impact on case outcomes (RPM Planning Associates, 1996, as cited in Currie, 2000). These clinics are still operational today.

Currie (2000) notes that the findings of these and other similar projects are listed in the Department of Justice Publication "Patterns in Legal Aid" 2nd edition (1995) as follows.

1) staff lawyers spend less time per case than private lawyers
2) staff lawyers tend to plead clients guilty more often than do private lawyers

15

3) clients of staff and private bar lawyers are convicted with similar frequencies

4) clients of staff lawyers tend to have less jail terms than private lawyers

3.2   Contracting Experiments[10]

3.2.1   The Portage Experiment of Manitoba

Block contracting was first introduced in 1992 in Manitoba as a way of providing legal services to the sparsely populated, rural Interlake Region of central Manitoba. Local law firms were invited to submit bids to provide full representation and duty counsel services to the area. Legal Aid Manitoba contracted with a private law firm and legal services were provided at lower costs than they would have been had private bar lawyers or staff lawyers been used. Upon the success of this experiment, blocks of 50 young offender cases began to be contracted out in Winnipeg in 1993. No formal evaluation of this block contracting has been undertaken, but management at Legal Aid Manitoba asserts that significant cost-savings have been achieved and that the quality of service has been satisfactory (Department of Justice, 1993, as cited in Currie, 2000).

3.2.2   British Columbia

British Columbia began experimenting with contracting schemes in 1997 with young offender and adult criminal legal aid cases. Initially, the project was supposed to encompass approximately 30% of all eligible criminal legal aid cases, but was met with fierce opposition from the private bar. The private bar protested contracting schemes on the premise that quality of service would fall and clients' choice of counsel would be violated (Poulos, Benton, Kraemer, McEown, & Duncan, n.d.). Due to the protest from the private bar, only a "pre pilot" contracting project for criminal cases was implemented in Vancouver and Victoria. The most serious types of cases were excluded. An independent research firm evaluated the pre-pilot project and found that the contracting scheme produced an estimated cost-savings of nineteen percent over private bar delivery with no issues of reduced quality of service (Focus Consultants, 1998, as cited in Currie,

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[10] Although contracting schemes are similar to judicare models because both employ private bar lawyers, the difference is that lawyers are paid according to a tariff in judicare models while they are forced to bid for blocks of cases in contracting schemes.

2000). Despite the findings that block contracting can be cost-reducing for criminal legal aid services, the Legal Services Society did not implement block contracting on a greater scale because of the strong protest from the private bar (Poulos, Benton, Kraemer, McEown, & Duncan, n.d.).

4 THE INCENTIVES

Past studies have shown that staff lawyers can often provide criminal legal aid services of comparable or even better quality at lower costs than private bar lawyers. Cost savings are achieved with staff lawyers because they tend to spend less time on individual cases and plead clients guilty more often and sooner than their private counterparts. Initially, it seems economically counter-intuitive that services of comparable quality are provided at lower costs from "in-house" production rather than contracting out to the private market. A closer look at the incentives faced by staff and private bar lawyers helps shed light on why the two different types of lawyers behave as they do. The incentives of the body that governs the legal aid plan are also taken into consideration.

4.1   The Incentives of the Organization that governs the legal aid program

Understanding the incentives of the organization that governs the legal aid program is a logical starting point because it is this organization that dictates how staff and private bar lawyers will be employed and paid. For example, in British Columbia, this is the Legal Services Society (LSS). Although these organizations rely on the provincial and federal governments for funding, they are considered independent and non-profit. The incentives of the organization itself are not as clear as the incentives for the lawyers. One theory that helps to explain the incentives of bureaucratic organizations is Niskanen's model of bureaucracy.

Niskanen (1971) proposes a model of bureaucracy based on budget maximization. According to this model, bureaucrats produce to a level such that the output maximizes the budget rather than the difference between revenues and costs. The bureaucrat behaves this way because he/she does not have property rights to the fiscal residuum (the difference between tax dollars collected for a public service and the

minimum costs of producing that service) and variables such as salary, power, patronage, and output of the bureau are all increased by expansions of the budget. Niskanen further predicts that output will be produced far beyond the social optimum but at minimum costs (Orzechowski, n.d. as cited in Borcherding (Eds.), 1977). The Niskanen model may not be the most appropriate for legal aid programs because although they are government affiliated, they are still considered independent. However, it is important to recognize that bureaucracies do not maximize profits the same way a competitive firm would. Perhaps all that can be taken from the Niskanen model is that the organization that governs a legal aid plan is not profit-maximizing.

For this paper, I make several assumptions about the organizations that govern provincial legal aid plans. First, I assume that because the same formula is used to calculate the federal contribution to criminal legal aid programs regardless of the service delivery model, the provincial organizations are indifferent between providing service through staff or private bar lawyers, everything else equal. That is, if cost and quality of service are equivalent between a staff and a private bar lawyer, the organization is indifferent between referring a case to a staff versus a private bar lawyer. Second, I assume that the organizations that govern provincial legal aid programs are concerned with meeting the demand for legal aid (feasibly representing as many eligible clients as possible).[11] This assumption is consistent with the stated aim of many programs to provide access to justice for low income people. Therefore, care would have to be taken to keep costs low. Third, the organizations likely care about the sentences given to clients, but not the outcomes of cases (i.e. whether the sentence was reached via trial or guilty plea). The organizations likely care about the sentences given to clients because the lighter the sentence, the more effective is the legal aid lawyer. Reaching the same sentence by a guilty plea rather than trial is preferred because it is often much cheaper. To sum up, the organization that governs the legal aid plan likely is indifferent between service delivery from staff vs. private lawyers, everything else equal, cares about meeting the demand for criminal legal aid services which implies a concern about costs, and also cares about the severity of sentences given to clients.

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[11] This assumption is more akin to viewing legal aid programs as benevolent organizations, rather than Niskanen's budget-maximizing bureaucracy. In reality, legal aid programs likely have elements of both extremes.

4.2 The Incentives of Staff Lawyers

Staff lawyers are paid salaries and are not paid on a case-by-case basis. Their salaries are generally independent of the number of cases undertaken and the outcomes and sentences of such cases. The salaries of staff-lawyers are not structured to provide incentives for staff lawyers to exert effort on cases. An immediate reaction to such a contract is that a staff lawyer has no incentive to work hard. Two possible scenarios emerge given the incentives of staff lawyers: staff lawyers could minimize the time spent per case because their salaries do not depend on the marginal time spent, or they could take only a few cases and "string them out"(Easton, Brantingham, & Brantingham, 1994). An observation of many staff models is that staff lawyers are overworked and have relatively high caseloads. I would argue that the effort of a staff lawyer is not directly observable to the organization that governs the legal aid plan, but the number of cases undertaken, outcomes and sentences are. If we assume that staff lawyers are expected to maintain a minimum caseload and that this minimum caseload is relatively heavy, then staff lawyers would have incentives to close individual cases as quickly as possible. Pleading a client guilty closes a case much more quickly than defending a client at trial and is therefore much less expensive. If there are no negative repercussions to the staff lawyer of pleading a case rather than proceeding to trial, then we would expect staff lawyers to plead cases often, which is what has historically been observed. Due to the high caseloads of staff lawyers and the lack of incentives to exert effort on cases, we would expect cases to be closed as quickly as possible with relatively little effort put into each case. As a result, average costs for staff lawyers should be relatively low.

4.3 The Incentives of Private Bar Lawyers

Private bar lawyers providing criminal legal aid services are paid on a case-by-case basis according to a legal aid tariff.[12] There are currently two different tariff payment schemes for private bar lawyers: block fees and hourly rates (National Council of Welfare, 1995). Under hourly rate payment schemes, private lawyers are paid their reported hours worked, but there are usually limits on the number of hours billable for certain services. For example, in Alberta, the maximum number of hours a lawyer is allowed to bill for an interview with a client for a level III offence[13] is 10 hours (Legal Aid Society of Alberta, 2004). Block fees are flat rates for various legal services that encompass all aspects that are not billable separately, such as case preparation and research, some court appearances, time spent interviewing witnesses, and most meetings with clients. Block fees are used to attempt to curb expensive tariff costs. Many legal aid plans use a combination of the two payment schemes to bill private lawyers. For example, British Columbia uses block fees for many criminal legal aid services, but time for trials is paid per half-day at trial[14] (Legal Services Society, 2006). The payment to private bar lawyers representing legal aid clients is not contingent on the sentence given. Given the payment schemes of the legal aid program, private lawyers have incentives to shirk and over-bill. For example, under an hourly payment scheme, if a lawyer is allowed to bill a maximum of 5 hours for a certain task and the task only takes 3 hours, there is no internal monitoring structure to prevent the lawyer from billing for the full 5 hours. Under these types of payment structures, lawyers have the incentive to do the minimum amount of work, but bill for the maximum amount possible. This is a documented phenomenon referred to as "bill-padding" and "strategic billing" (National Council of Welfare, 1995). Block fees also encourage private bar lawyers to minimize the effort put into cases because the payment is identical regardless of the sentence. I would argue that block fees are really not all that different from hourly rates in terms of incentives because lawyers have the incentives to always bill for the maximum number of hours in an hourly

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[12] For the purposes of this paper, I am assuming that private bar lawyers working under a tariff are randomly assigned cases, which they accept. In other words, they are not "cherry-picking" and accepting only certain cases. This allows for the assumption that the types of cases handled by staff and private bar lawyers are comparable. This may not always be true in reality.

[13] A level III offence is the most serious type of offence.

[14] This is similar to hourly billing.

scheme regardless of how many hours are actually put it, which is essentially like a block fee.

Private bar lawyers have more of an incentive to unduly lengthen the time spent in all aspects of legal representation. This is true for cases that are pleaded and those that go to trial. Private bar lawyers are more likely than staff lawyers to plead their clients guilty at trial rather than before. This is because private bar lawyers are paid for their time at trial. Once a case goes to trial, private bar lawyers have more of an incentive than staff lawyers to lengthen the trial time. Tariffs in several provinces have accounted for this by paying different tariff rates depending on how many days a case has been at trial. For example, the criminal legal aid tariff in British Columbia pays a higher rate for the first two half days at trial than for subsequent half days[15] (Legal Services Society, 2006).

4.4   Summary of Incentives

The different incentives facing staff and private bar lawyers help to explain why staff lawyers are often able to provide services at lower costs. Staff lawyers have incentives to close cases as quickly as possible because the income of the staff lawyer is independent of the outcome of the case (whether it is pleaded or sent to trial) and also because they have relatively high caseloads. Private bar lawyers providing legal aid services tend to have higher costs because of the incentive to bill-pad and lengthen the time spent per case. The incentives of the body that governs the legal aid plan are less clear than those of the lawyers, however I believe it can be reasonably asserted that the organization is not profit-maximizing as firms are normally assumed to be. I am assuming that the organization is indifferent between referring cases to staff and private bar lawyers, everything else equal, wants the demand for legal services to be met, which implies a concern about costs, cares about the severity of sentences, and does not care whether cases are pleaded or sent to trial. This implies that the actions taken by staff lawyers (providing services at lower costs by pleading clients more often) would be approved by the organization as long as the quality of service was not harmed.

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[15] This is true only for cases that are categories I, II, and III. Trial half days for category IV cases (the most serious) are paid at a flat rate.

5 EMPIRICAL RESULTS

This paper is concerned with exploring the relative cost differences among the provincial criminal legal aid programs. The type of service delivery model, as determined by the staff-private lawyer mix in service delivery, is one aspect of criminal legal aid that differentiates the provincial programs. One hypothesis is that as the percentage of criminal legal aid cases (as proxied by approved criminal legal aid applications) referred to staff lawyers increases, costs should fall. This hypothesis is reasonable given that past studies have demonstrated that staff lawyers are often able to provide comparable or even better service at lower cost than private bar lawyers. The effect of the proportion of criminal legal aid cases referred to staff lawyers on costs will be explored with a series of Ordinary Least Squares (OLS) regressions. The data used is from the Canadian Centre for Justice Statistics, a division of Statistics Canada. It is provincial-level aggregate data for the ten provinces for years 1996-2004. The data can be found in the Statistics Canada publications *Legal Aid in Canada: Resource and Caseload Statistics* for years 2004/05 and 2001/02 and *Legal Aid in Canada: Resource and Caseload Data Tables, 2000-01*. To address the two different measures of the relative cost of criminal legal aid, regressions are run first specifying the dependent variable as average direct criminal legal aid real expenditure (a proxy for average cost) and then as real per capita direct criminal expenditure. This section first outlines the methodology for the set of regressions with average direct criminal real expenditure (AC) as the dependent variable, presents the results, then identifies the most appropriate regression for the model and describes its implications. The same exercise is then done for the regressions with real per capita direct criminal expenditures as the dependent variable. Finally, the results and their implications are compared.

5.1 Methodology and Results for Regressions with Average Cost as the Dependent Variable

5.1.1 Average Cost and the Percentage of Approved Criminal Legal Aid Applications referred to Staff Lawyers

The dependent variable in the first model is average direct criminal legal aid real expenditure, which is a proxy for average cost. It is calculated by dividing the total direct criminal legal aid real expenditure (in 1992 real dollars) by the total number of approved criminal legal aid applications in every province for the years 1996-2004. This proxy is used because average cost is not often directly reported by the provinces. Although calculating a proxy for average cost this way is the best measure given the data available, it has its limitations. Direct criminal legal aid real expenditure includes more than funds spent on the cases directly; average direct expenditures encompass the provision of legal service, information, referrals to other agencies, and representation, including payments made to private lawyers. Also, the total number of approved criminal legal aid applications is not necessarily identical to the actual number of cases per year. Some criminal cases that proceed to trial last several years. This means that even if spending on a particular case spans several years, the case itself will only be counted once in the year the application was approved. Even with these limitations, average direct criminal legal aid real expenditure is the most appropriate proxy for average cost given the circumstances and will appear in the regressions as AC.

Average cost curves are traditionally graphed with average cost on the vertical axis and quantity (production) on the horizontal axis. The number of approved criminal legal aid applications (N) is therefore a necessary component of the model.[16] Classical microeconomic theory tells us that average cost curves tend to be U-shaped, which means that average costs initially fall for low levels of output, reach a local minimum, and finally rise for higher levels of output. Including the square of the number of approved criminal legal aid applications (N^2) allows the average cost curve to take this quadratic

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[16] Including N on both sides of the equation may lead to what is known as "division bias," which may have an influence on the estimates. For more information on division bias, see Borjas (1980).

form. The N and N^2 terms and their interactions with other variables determine the shape of the provincial average cost curves.

The primary variable of interest on the right hand side is the percentage of total approved criminal legal aid applications that are referred to staff lawyers ($S\%$). It is calculated by dividing the number of approved criminal legal aid applications referred to staff lawyers by the total number of approved legal aid applications (referred to both staff and private bar lawyers). This variable is left in decimal form, so it is restricted to be between 0 and 1. Therefore, a value of 0.50 for the $S\%$ variable means that 50% of all approved criminal legal aid applications are referred to staff lawyers. The $S\%$ variable appears in the regressions on its own and also interacted with the N and N^2 terms.

5.1.2 Provincial Dummy Variables and Control Variables

With a data set of only 81 observations, it is challenging to build a model that takes into account all factors that could have significant effects on the average cost of criminal legal aid without "using up" too many degrees of freedom. That is why provincial dummy variables play such an important role in these regressions. Provincial dummy variables are included to account for provincial variation that is not captured by the control variables or the $S\%$ term and its interactions. Dummy variables for Newfoundland and Labrador (NL), Prince Edward Island (PE), Nova Scotia (NS), New Brunswick (NB), Quebec (QE), Ontario (ON), Manitoba (MN), Saskatchewan (SA), and Alberta (AB) are included. The provincial dummy variable for British Columbia is omitted so all comparisons are made to British Columbia levels. Some of the regressions also include interaction terms between the provincial dummy variables and the number of approved legal aid applications (N).

The regressions also include three control variables and time dummy variables. The three control variables are population, crime rate, and a low-income measure. The provincial population appears in regressions as *pop* and is equal to the total number of people in each province (both sexes, all ages). The population variable is included because the more populated provinces seem to generally have higher average costs. The crime rate variable, *crime*, is defined as the total number of reported incidents per 100,000 people. The low income variable, which appears as *lowinc* is defined as the

percentage of people in each province whose income falls below the low income cutoffs before tax (1992 base). The low income variable is in actual percentages, so it is restricted to be between 0 and 100. The crime rate and the low income variables are included as controls because they would presumably have some effect on the demand for criminal legal aid. Time dummy variables are included to account for time and also because it is observed that average direct real criminal expenditure tends to rise over time. Dummy variables for the years 1997-2004 are included with the year 1996 as the omitted dummy variable.

Summary statistics of the variables including the number of observations, the means, standard deviations, and minimum and maximum values for each year for both the individual provinces and for all ten provinces are included in the appendices in Table 6.

5.1.3 The Regressions

Seven preliminary regressions are run. The results of these regressions can be found in Table 7 in the appendices. The first regression is a baseline model including only the N and N^2 terms, the $S\%$ variable, the three control variables, and the time dummy variables. The provincial dummy variables are excluded from this first regression, which is labeled "B" for baseline. All further regressions include the N and N^2 terms, the $S\%$ variable, the provincial dummy variables, the three control variables, and the time dummy variables. The differences among the subsequent regressions are the inclusions or exclusions of various interaction variables. Regressions 1 and 2 do not contain any interaction terms between the N and N^2 terms and the $S\%$ variable. Regressions 3 and 4 include an interaction term between N and $S\%$ among the right hand side variables ($N*S\%$). This interaction variable allows for the possibility that the impact of a change in the percentage of approved criminal legal aid applications referred to staff lawyers may vary depending on the relative size of the legal aid program (the number of approved legal aid applications). Regressions 5 and 6 include $N*S\%$ and an interaction term between N^2 and $S\%$ ($N^2*S\%$) . Taken together, these two interaction variables allow the shape of the average cost curve to vary depending on the percentage of approved criminal legal aid applications referred to staff lawyers. Regressions 2, 4, and 6 include

interaction variables between the provincial dummy variables and N. These interaction variables allow for the possibility that the effect of the number of approved legal aid applications (N) on average cost may vary among the different provinces. The first regression has the least amount of right hand side variables, while the sixth regression has the most. The robust standard errors are reported in brackets for all regressions.

5.2 Model Choice for Regressions with Average Cost as the Dependent Variable

An immediate observation from Table 7 is that $S\%$ variable has a positive coefficient and is statistically significant in every regression except for the baseline regression, where it is statistically significant with a negative coefficient. This is a surprising result because the original hypothesis was that as the percentage of approved legal aid cases referred to staff lawyers increased, average direct criminal real expenditure (average cost) would fall. The positive coefficient on the $S\%$ variable in regressions 1 and 2 implies that increases in the percentage of approved legal aid applications handled by staff lawyers are associated with the average cost curve shifting up, other things equal. Even though the baseline regression has the expected negative sign on the $S\%$ coefficient, the results of the baseline regression are included only for completeness and should not be seriously analyzed because they do not include the provincial dummy variables. The most expensive provinces are those that use judicare criminal legal aid models (British Columbia, New Brunswick, and Ontario) and this effect is being picked up in the $S\%$ variable when the provincial dummy variables are excluded. Including the provincial dummy variables is therefore critical because they account for the fact that provinces with the highest average costs employ judicare models and allow changes in the staff-private lawyer mix in service delivery within provinces to be accounted for in the S% variable. We therefore exclude the baseline model from the model choice discussion.

To choose the most appropriate model among the six presented, ideally we would like to perform F-tests to test the joint significance of variables. Unfortunately, this is not feasible because robust standard errors are specified. The first course of action is to

establish whether the interaction variables between the provincial dummies and N should be included in the model. Looking at the series of regressions in Table 7, we see that regressions 1 and 2 have the same specifications except that regression 2 includes the provincial-N interaction terms. This is the same specification pattern for regressions 3 and 4, as well as 5 and 6. Looking at each pair of regressions in turn, we can see that in each case, five of the eight provincial-N interaction variables are statistically significant at least at the 10% level. Including them also makes the low income variable and many of the time dummy variables statistically significant while they were insignificant beforehand. Therefore, we will include the provincial-N interaction variables in the model, which narrows the pool of possible regressions down to regressions 2, 4 and 6. The only difference in the specification of regressions 2 and 4 is that regression 4 includes the $N*S\%$ term, which is statistically insignificant. Therefore, I can eliminate regression 4 and now the two possible regressions are 2 and 6. Choosing between regressions 2 and 6 is difficult because both could be appropriate representations of the average cost function.

The only specification difference between regressions 2 and 6 is the inclusion of two additional interaction terms in regression 6. Regression 6 includes the interaction terms $N*S\%$ and $N^2*S\%$ while regression 2 does not. In regression 6, $N*S\%$ is statistically insignificant while $N^2*S\%$ is statistically significant. In both regressions, the $S\%$ variable is statistically significant with a positive coefficient. Realistically, either regression could be chosen to represent the average cost model. If the regressions were run without the White-robust standard errors, we would be able to do an F-test for joint significance. For the sake of determining whether or not $N*S\%$ and $N^2*S\%$ should be included, these regressions are run without the robust specification. The results of these regressions are found in Table 8 in the appendices. When we perform an F-test on regressions 2 and 6, we find that the F-statistic is 2.4511. The critical F-values at the 5% and 10% levels, respectively, are 3.1996 and 2.4218. We therefore barely reject the null hypothesis of joint insignificance at the 10% level and do reject the null at the 5% level. The difference between regressions 2 and 6 is that regression 6 allows the shape of the average cost curves to be affected by the percentage of approved criminal legal aid applications referred to staff lawyers. If we really believe that the shapes of average cost

curves differ depending on the percentage of approved criminal applications referred to staff lawyers, then regression 6 is the most appropriate. If the interaction terms are not included, as in regression 2, then changes in the $S\%$ variable would only shift the AC curves vertically, but not affect their shapes. I will argue that regression 6 is the more appropriate regression not only because it produces more interesting results, but it is more complete and it allows the shapes of the average cost curves to be affected by $S\%$. However, we cannot forget that the additional interaction terms are barely significant. Therefore, although the remainder of the paper will use regression 6 to represent the average cost model, any definitive statements regarding the effect of the $S\%$ variable on average costs will have to include a caveat regarding the marginal joint significance of the two interaction terms. The weak significance of the two interaction terms may also be due in part to the limited data set.

5.3   The Implications of the Results

5.3.1   The Effect of $S\%$ on AC

Having established that regression 6 will be used to represent the average cost model, we can determine the question we had initially set out to answer: how does the relative proportion of criminal legal aid cases referred to staff lawyers affect average cost? Looking at Table 7, an immediate observation is that the $S\%$ variable appears three times in the model and is statistically significant with a positive coefficient as a term by itself and when interacted with N^2. The interaction term between $S\%$ and N is negative and statistically insignificant. To establish how the average cost function changes as the percentage of criminal legal aid cases referred to staff lawyers varies, we take the first derivative of the average cost function with respect to S% and obtain:

$$\frac{\partial AC}{\partial S\%} = 664.96 - 0.0544N + 0.000000823N^2$$

The function above describes the effect of changes in the $S\%$ variable on average cost for different values of N.[17] The graph of this quadratic is illustrated in Figure 3 and can be found in the appendices. The function crosses the horizontal axis at $N=16,191$ and

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[17] Although the coefficient on the N^2 term is relatively very small, it is multiplied by the square of the number of approved legal aid applications, which makes its effect substantial.

29

N=49,909. This means that in the sets N= (0, 16191) and N= (49909, ∞), the derivative of average cost with respect to $S\%$ is positive. In the set N= (16191, 49909), the derivative of average cost with respect to $S\%$ is negative. This result implies that for relatively low and relatively high provincial caseloads, increasing the percentage of criminal legal aid cases referred to staff lawyers is associated with higher average costs. However, for intermediate caseloads that fall within the two limits, increasing the percentage of criminal legal aid cases referred to staff is associated with falling average costs. This result implies that average cost savings from referring a higher percentage of criminal legal aid cases to staff lawyers may be possible, but only for provinces with intermediate level caseloads.

Again, it is important to mention that this result originates from two interaction terms that are barely jointly significant. In fact, it is the inclusion of the $N*S\%$ term, which is statistically insignificant, that is allowing for the derivative to be negative for some values of N. If we ignored the $N*S\%$ term by assuming it was zero, then the derivative of average cost with respect to $S\%$ would be positive for all values of N. Similarly, had we chosen not to include the two interaction terms and chosen to represent the average cost model with regression 2 instead, the derivative would have been positive for all values of N. This is because $S\%$ appears on its own in regression 2 with has a positive, statistically significant coefficient and is not interacted with other variables. In other words, the result that cost-savings may be able to be achieved from referring proportionally more criminal legal aid cases to staff lawyers, even just for limited caseload levels, is the direct result of a statistically insignificant variable. If the statistically insignificant variable is disregarded either by assuming it is equivalent to zero or not including either of the interaction terms and instead referring to regression 2, then average costs actually rise for all values of N as proportionally more criminal legal aid cases are referred to staff lawyers.

5.3.2   The Effect of $S\%$ on the AC- minimizing N

One convenient feature of quadratic average cost curves is that because they are U-shaped, the functions have a minimum value. Therefore, we are able to determine the number of cases that minimizes the average cost function ($Nopt$). Once we have a

function for the optimal number of cases, we can determine the effect of changes in the *S%* variable on the optimal number of cases. In other words, the cost-minimizing number of cases may vary depending on the percentage of approved criminal legal aid applications handled by staff lawyers. This could have important policy implications. For example, if the optimal number of cases increased as proportionally more cases are referred to staff lawyers, then staff-models may not be the most appropriate for relatively small provinces. To find the expression for the optimal number of cases, we take the first derivative of the average cost function with respect to *N*. Performing this minimization we obtain:

$$\frac{\partial AC}{\partial N} = -0.1586 + (2)(0.00000311)N - 0.054S\% + (2)(0.000000823)N^*S\% - 0.5514NL -$$

$$0.0559PE + 0.1228NS - 0.487NB - 0.399QE - 0.244ON + 0.0419MN + 0.0974SA -$$

$$0.0166AB$$

Setting the derivative to zero and solving for N, we obtain:

$$Nopt = \frac{\begin{array}{c}(0.1586 + 0.054S\% + 0.5514NL + 0.0559PE - 0.1228NS + 0.487NB \\ + 0.399QE + 0.244ON - 0.0419MN - 0.0974SA + 0.166AB)\end{array}}{0.00000622 + 0.000001646S\%}$$

The above expression defines the average cost-minimizing caseload. The dummy variables that are present in *Nopt* expression imply that for these provinces, the number of criminal legal aid cases (approved applications) that minimizes average cost is different than *Nopt* for British Columbia given an identical *S%*. Specifically, this implies that for the same value for *S%*, the optimal number of cases in Newfoundland and Labrador, Prince Edward Island, New Brunswick, Quebec, Ontario and Alberta are all higher than for British Columbia while the optimal number of cases in Nova Scotia, Manitoba, and Saskatchewan are all lower. However, the values for the *S%* variable vary greatly among the provinces and must be taken into account in order to determine the optimal number of cases in each province. This expression will be used in the next sub-

section to determine the average cost-minimizing number of cases for individual provinces.

To determine the effect of the proportion of cases referred to staff lawyers on the cost-minimizing number of cases, we take the derivative of $Nopt$ with respect to $S\%$. Taking the derivative of the above expression with respect to $S\%$, we get the result that:

$$\frac{\partial Nopt}{\partial S\%} > 0$$

This result implies that the cost-minimizing number of cases increases as the percentage of approved legal aid applications referred to staff lawyers increases.[18] Again, it is important to point out that these results are driven by the inclusion of the two interaction variables ($N*S\%$ and $N^2*S\%$) with the interaction term between N and $S\%$ being statistically insignificant. If we ignore the statistically insignificant term, then the derivative of $Nopt$ with respect to $S\%$ is negative, which would imply that the cost-minimizing number of cases decreases as the percentage of cases referred to staff lawyers increases (which is the opposite result). Therefore, the sign of the derivative and therefore the result depends entirely on the inclusion of a statistically insignificant variable.

5.3.3 The Average Cost Curves of the Individual Provinces

Another useful exercise to investigate average cost differences among the provinces is to determine the expressions for the average cost curves of individual provinces. From these expressions, we can determine the average-cost minimizing number of cases for each province and compare these values to the actual provincial caseloads. The provincial averages for the nine years are used as the numerical values for the $S\%$, lowinc, crime, and pop variables. One average cost curve is therefore generated for each province. The individual provincial average cost curves can then be minimized with respect to N and the cost-minimizing number of criminal legal aid cases for each province can be determined. Table 9, which can be found in the appendices, lists the average cost function for each province, as well as the optimal number of criminal legal

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[18] The derivative collapses to a value of 0.000000075.

32

aid cases and the actual N (averaged over the nine years) for each province. Also found in the appendices is Figure 4, which displays the individual AC curves for each province.

Looking at Table 9 and Figure 4, a number of details are observed. Looking first at Table 9, an immediate observation is that the difference between the average of the actual number of cases and the average-cost minimizing number of cases is large for some provinces and small for others. In other words, some provinces have average actual caseloads that are close to their average-cost minimizing number of cases while others are 'producing' far from the average-cost minimizing level. In particular, Nova Scotia, Quebec, Ontario, Saskatchewan, Alberta, and British Columbia all have average actual caseloads that are relatively close to their average-cost-minimizing number of cases. In order for Manitoba to 'produce' at the cost-minimizing number of cases, the actual caseload would have to double. Newfoundland and Labrador, Prince Edward Island, and New Brunswick all have average actual caseloads that are far lower than their average-cost minimizing number of cases. For example, the cost-minimizing number of criminal legal aid cases for New Brunswick is 102,559 while the average actual number of cases is only 1,353. It can be inferred that these Atlantic provinces have criminal legal aid programs that would benefit in terms of falling average costs from much higher caseload levels. However, this is a moot point because it is safe to assume that these relatively small provinces will never have caseloads of that magnitude. It is also interesting to note that Quebec, which has relatively low average costs, is producing on average very close to its cost-minimizing number of cases.

Figure 4, which displays the provincial average cost graphs, also invites some interesting observations. First, the average cost curves for New Brunswick and Newfoundland and Labrador are dramatically out of line with those of the provinces. They intersect the vertical axis close to the vertical axis intercepts of most of the other provincial AC curves, but their AC curves fall dramatically such that for most values of N, their average costs are negative. However, the actual average caseload for New Brunswick is low enough that it is operating on the left-most portion of the curve where the average cost is still positive. The odd shape of the average cost curve for Newfoundland and Labrador could be attributed to the fact that the data for this province is patchy. Second, the average cost curves for Ontario and Quebec have vertical axis

intercepts much higher than the other provinces, and also reach minimum values at much higher values of N. Finally, the average cost curves for British Columbia and Alberta are close in proximity and have similar shapes except that the curve for British Columbia is slightly above the curve for Alberta. This is an interesting result because it seems to fit with current observations of the legal aid programs in these two provinces. In particular, both use judicare models for criminal legal aid and have similar actual average caseloads but British Columbia has significantly higher average costs than Alberta.

5.4 Methodology and Results for Regressions with Real Per Capita Direct Criminal Expenditure as the Dependent Variable

The methodology for the set of regressions with real per capita criminal legal aid expenditure as the dependent variable is very similar to the methodology for the regressions with average cost as the dependent variable. The same general model for the regressions from the previous section is used here as well. However, terms with N^2 are excluded from the regressions. The reason for this exclusion is that economic theory does not tell us that per capita cost curves tend to be U-shaped. Some preliminary regressions were run with the N^2 term and the results were unsatisfactory. A baseline regression, labeled "B", and three additional regressions were run with the new dependent variable. The results of these regressions (with robust standard errors in brackets) can be found in Table 10 in the appendices. Similar to the first set of regressions, the baseline regression does not include the provincial dummy variables. All subsequent regressions include N, $S\%$, the provincial dummy variables, the three control variables (*pop*, *crime*, and *lowinc*) and the time dummy variables. The last two regressions also contain the interaction variables between the provincial dummy variables and N, whereas the first one does not. The only difference between regressions 2 and 3 is that the third regression contains the interaction term between N and $S\%$.

5.5 Model Choice for Regressions with Per Capita Expenditures as the Dependent Variable

Regardless of whichever model is chosen, an immediate observation is that the $S\%$ variable is statistically insignificant in all regressions except for the baseline regression, where it is statistically significant with a positive coefficient. The baseline regression does not include provincial dummy variables and will not be considered as an appropriate representation of the model. Looking at regressions 1, 2, and 3, it can be seen that the $S\%$ variable has a positive coefficient in the first regression and a negative coefficient in the second and third regressions. The third regression includes an interaction term between $S\%$ and N, which is also statistically insignificant. Because of the robust standard errors, F-tests cannot be used with these regressions to determine the most appropriate model. The first regression does not include the provincial-N interaction terms. The only difference between regressions 1 and 2 is the inclusion of these interaction terms. Looking at regression 2, we can see that six out of eight of these interaction terms are statistically significant. Therefore, just as was done for the regressions with AC as the dependent variable, we include the interaction variables between N and the provinces. In order to decide between regressions 2 and 3, we must evaluate whether $N*S\%$ should be included in the model. Comparing regressions 2 and 3 we see that not only is the $N*S\%$ variable statistically insignificant, but its inclusion also does not change the other results by any notable degree. Therefore, I would argue that regression 2 is the most appropriate for modelling per capita expenditures.

5.6 The Implications of the Results

5.6.1 The Effect of $S\%$ on Per Capita Costs

The $S\%$ variable has a negative coefficient, which implies that increases in the percentage of approved criminal legal aid cases referred to staff lawyers are associated with falling per capita costs. This is aligned with the original hypothesis of a negative relationship between costs and the percentage of cases referred to staff lawyers. However, the $S\%$ variable is statistically insignificant in this regression.

5.7 Comparison of the Average Cost and Per Capita Cost Models

Average costs and per-capita costs are two different measures of the relative cost of criminal legal aid among the provinces. Figure 5 is a scatter plot of average costs and per capita costs and is found in the appendices. Looking at Figure 5, we can see that average costs and per capita costs seem to be positively correlated for the majority of points on the scatter plot. There are some outliers in the lower right hand corner, which are the points for New Brunswick. Earlier, it was noted that New Brunswick had the unusual characteristic of relatively high average costs but relatively low per-capita costs. This could imply that although New Brunswick funds relatively few criminal legal aid cases (New Brunswick has a significantly greater population than Newfoundland and Labrador, yet has less than half the caseload) the cases that are funded by legal aid are expensive. Aside from New Brunswick, the general trend is that provinces with relatively high average costs also have relatively high per capita costs. The only other province out of line with this trend is Saskatchewan, which is always among the lowest average cost provinces but has relatively high per capita costs for criminal legal aid. This could be in part due to the fact that Saskatchewan has the highest average crime rate for all provinces over the years surveyed.[19] This result could imply that Saskatchewan has a relatively high demand for legal aid, therefore having a high per-capita cost, but provides services at relatively low average costs.

It is interesting that the percentage of criminal legal aid cases referred to staff lawyers has such a different effect on the two models. For the first model where the dependent variable is average cost, increases in the relative proportion of criminal legal aid cases referred to staff lawyers are associated with increases in average cost, or depending on the model specification, decreases in average costs but only for certain values of N. This is starkly different from the effect of the $S\%$ in the second model, where increases in the percentage of criminal legal aid cases referred to staff lawyers are associated with falling per-capita costs. However, the coefficient on the $S\%$ variable in the second model is statistically insignificant. This difference may be due to the fact that the two measures of cost are largely influenced by different factors.

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[19] See Table 6: Summary Statistics

Although average cost and per capita cost both measure the relative costs of criminal legal aid programs among the provinces, they are two different measures that are likely affected by variables in different ways. For example, the crime rate variable is statistically significant with a positive coefficient in the per capita cost model, but statistically insignificant in the average cost model. Therefore, the provincial crime rate, which likely effects the demand for legal aid, tends to be positively associated with rising per capita costs but has no significant association with the average cost of criminal legal aid. Another odd trend among the right-hand side variables is that many of the provincial dummy variables have different signs depending on which dependent variable is being estimated. For example, the dummy variables for Newfoundland and Labrador, Prince Edward Island, Nova Scotia, New Brunswick, Manitoba, Saskatchewan, and Alberta all have negative coefficients when the dependent variable is average cost and positive coefficients when the dependent variable is per capita cost. This means all else equal, these provinces have higher per capita per capita costs and lower average costs than British Columbia. This is a curious result and likely is due to the fact that these two measures of relative cost are estimating two very different characteristics of criminal legal aid. For example, the actions of lawyers may have relatively less of an impact on the per capita costs of legal aid because per capita expenditures may be more of a budgetary decision. If the legal aid budget is relatively fixed, then per capita costs could be thought of as relatively fixed and independent of the actions of the lawyers. Therefore, lawyers operating within a system of more or less fixed per capita costs may still be able to exploit and affect average costs. So, the $S\%$ variable could have an effect on average costs, but not on per capita costs.

6 DISCUSSION

6.1 Review of Results

My hypothesis was that the higher the percentage of criminal legal aid cases referred to staff lawyers, the lower would be the costs. This hypothesis was tested using two measures of cost: average cost and per capita cost. The findings do not strongly support the hypothesis. In fact, depending on the specification of the models, the hypothesis is often rejected. The findings also differ greatly depending on which dependent variable is being considered.

In the first model, which has average direct criminal real expenditure (AC) as the dependent variable, we estimate the effect of changes in the percentage of criminal legal aid cases referred to staff lawyers on average costs by taking the derivative of AC with respect to $S\%$. This derivative is positive for relatively low values of N, then negative for intermediate values, then positive once again. This result implies that the savings in average costs resulting from referring a higher proportion of cases to staff lawyers cannot be achieved for programs with relatively high of relatively low caseloads. Only for caseloads of intermediate values are the average cost savings from staff lawyers possible. However, this result is driven by the coefficient on the $N*S\%$ term, which is statistically insignificant. Had we assumed instead that the coefficient on this statistically insignificant variable was equal to zero, the derivative of AC with respect to $S\%$ would have been positive for all values of N, meaning that increasing in percentage of criminal legal aid cases referred to staff lawyers is associated with rising average costs for all values of N. The statistically insignificant variable is one of two interaction variables that are jointly barely significant at the 10% level. Had we specified the model to not include these interaction terms (i.e. used regression 2 instead of 6), we again would have found that increases in the relative proportion of approved criminal legal aid cases referred to staff lawyers are associated with rising average costs for all caseloads. Therefore, the result that average cost savings are possible from referring a greater proportion of

criminal legal aid cases to staff lawyers only for certain intermediate caseload levels is not an overly robust result. That being said, we can still draw some interesting inferences from the result. For legal aid programs with small caseloads (small N) it makes sense that increasing the percentage of cases to staff lawyers would likely result in rising average costs. For relatively low caseloads, a small number of staff lawyers could handle all the criminal legal aid cases. These lawyers could theoretically have relatively high caseloads and low average costs, assuming that all cases were handled out of no more than a couple of staff-lawyer offices. However, individuals in need of criminal legal aid are not located only in major cities which are where staff lawyer offices are likely located, but are spread out over a given province. The question then becomes whether it is cost-effective to set up staff lawyer clinics all over a small province when a relatively higher percentage of cases are referred to staff lawyers. Setting up staff lawyer clinics throughout a province is costly, especially when many of the clinics will not have high caseloads. In cases like this, it would make sense to provide criminal legal aid services through private bar lawyers, who would already be distributed throughout the province. For intermediate values, cost savings can be achieved, which was what was initially expected. Provinces with caseloads in this intermediate range include Alberta and British Columbia. Then for higher levels of caseloads, referring a higher proportion of cases to staff lawyers is associated with rising average costs. This could be due to a number of factors, including having to hire more staff lawyers as the percentage of cases referred to staff lawyers increases marginally. This effect will be discussed below in greater detail.

From the first model, we can also find an expression for the average-cost minimizing number of cases and determine the effect of changes in the percentage of criminal legal aid cases referred to staff lawyers on this expression. To do this, we take the derivative of the cost-minimizing number of cases ($Nopt$) with respect to $S\%$, and find that this derivative is positive. This implies that as the percentage of cases referred to staff lawyers rises, the cost-minimizing number of criminal legal aid cases also rises. However, this result is being driven by a statistically insignificant variable ($N*S\%$). Had we ignored this term, the derivative would have had the opposite sign. Therefore, based on these results, we cannot make a confident statement either way regarding the effect of

changes in the percentage of criminal legal aid cases referred to staff lawyers on the average cost-minimizing number of cases.

In the second model, which has per capita costs as the dependent variable, the coefficient on the $S\%$ variable has a negative sign, which implies that as proportionally more cases are referred to staff lawyers, per capita costs fall. Although this negative relationship between the $S\%$ variable and cost was initially hypothesized, the $S\%$ variable is statistically insignificant. Although the coefficient has the "right" sign, I am not confident in this result because of its statistical insignificance. The insignificance of this result may be due to the notion that per capita spending may be more of a budgetary decision that the actions of the lawyers themselves have little effect on. The issue of why average costs tend to rise as the percentage of cases referred to staff lawyers increases still needs to be addressed and is illustrated below.

6.2   Illustration of Average Cost Result

To illustrate why average costs are rising as the percentage of criminal legal aid cases referred to staff lawyers rises, we can decompose average costs into costs accrued to staff lawyers and costs accrued to private bar lawyers. The total costs represent direct criminal legal aid expenditure to each type of lawyer, which encompasses not only representation but also services such as duty counsel, summary services, etc. The total number of cases, N, is the sum of the cases referred to private bar lawyers and the cases referred to staff lawyers. We get the following three equations.

$$N = N_P + N_S$$
$$TC = TC_P + TC_S$$
$$AC = \frac{TC}{N} = \frac{TC_P + TC_S}{N_P + N_S}$$

We can illustrate a higher percentage of criminal legal aid cases being referred to staff lawyers by taking one case away from private lawyers and shifting it to staff lawyers. The overall number of cases remains the same. The only variables that can change are the total costs of staff lawyers and the total costs of private bar lawyers.

$$AC = \frac{TC}{N} = \frac{TC_P + TC_S}{N_P + N_S} \Rightarrow AC' = \frac{TC'_P + TC'_S}{(N_P - 1) + (N_S + 1)} = \frac{TC'_P + TC'_S}{N_P + N_S} = \frac{TC'_P + TC'_S}{N}$$

Assuming that staff lawyers are paid fixed salaries, the total costs to staff lawyers should not increase as one more case is referred to staff lawyers as opposed to private bar lawyers. As one less case is referred to the private bar, total costs to private bar lawyers should fall. Therefore, average costs should theoretically fall as more cases are referred to staff lawyers because total costs to private bar lawyers should fall while total costs to staff lawyers should be constant. This is illustrated by the following expression.

$$AC' = \frac{TC'_P + TC'_S}{N} = \frac{(TC_P \downarrow) + \overline{TC_S}}{N}$$

But that is not what the empirical results illustrate. According to the results, average costs rise as the percentage of cases referred to staff lawyers rises. The following series of expressions describes this result.

$$AC = \frac{TC_P + TC_S}{N} < AC' = \frac{TC'_P + TC'_S}{N}$$

$$\therefore TC_P + TC_S < TC'_P + TC'_S$$

For the above inequality to hold, the total costs of either private bar lawyers or staff lawyers must rise, or both. It does not make economic sense to have the total costs of private bar lawyers rise as one less case is referred to them. In fact, they should fall. Therefore, the total costs of staff lawyers would have to rise. This seems to contradict our assumption that because staff lawyers are paid fixed salaries, the total cost of staff lawyers should be constant. However, this does not take into account the possibility of having to hire more staff lawyers or pay existing staff lawyers for overtime as a greater proportion of cases are referred to staff lawyers because of the already heavy workloads of staff lawyers.

6.3　Explanation of Average Cost Result

In order for staff lawyers to be cost-effective, they must maintain minimum workloads. In provinces that employ staff models, it has been noted that the legal aid programs are understaffed and inadequately funded (National Council of Welfare, 1995). One study even described the caseloads of staff lawyers as "inhuman" (Report of the Saskatchewan Legal Aid Review Committee, 1992; as cited in National Council of Welfare, 1995). In provinces that employ judicare or mixed models, staff lawyers also have relatively heavy workloads. In these types of models, staff lawyers are often used for very specific tasks. These specific tasks include handling only specific types of cases out of staff-lawyer offices or performing proportionally more services that are not considered legal representation, such as duty counsel. An example of a judicare province that uses staff lawyers for specific purposes is Alberta; in Alberta, the Youth Criminal Defence Office provides legal representation for young offenders with staff lawyers working out of offices in Calgary and Edmonton (Legal Aid Alberta, 2006). Another example is the staff lawyer office in Brantingham's (1981) Burnaby Public Defender study, which accepted cases until the maximum caseload was reached and all subsequent applications were referred to the private bar. Other services, such as duty counsel, often account for a significant portion of the workload of staff lawyers in judicare or mixed provinces. For example, two important legal advice services in Alberta are provided by staff lawyers- Brydges Duty Counsel Service and the Alberta Law Line. Brydges Duty Counsel Service is a 24-hour telephone service that provides legal advice to all people in Alberta detained by the police. The Alberta Law Line is a phone service that provides people with free legal information and legal referrals. Staff lawyers provide "brief services" that are conducted entirely over the phone and do not represent clients in court. The staff lawyers that provide Law Line services are the same staff lawyers that provide daytime Brydges Duty Counsel (Legal Aid Alberta, 2006). Another example is Quebec, where duty counsel services are provided as a right by staff lawyers including a free telephone consulting service (Tsoukalas & Roberts, 2002). What these examples suggest is that staff lawyers are likely not idly waiting for case referrals. Rather, staff lawyers seem to maintain heavy workloads regardless of whichever system they happen to be operating in.

Given that staff lawyers likely maintain relatively heavy workloads regardless of the service delivery model, it may be the case that referring a higher proportion of criminal legal aid cases to staff lawyers necessitates extra expenditures, meaning that the total costs accrued to staff lawyers would not be constant. These extra expenditures could include the hiring of new staff lawyers, the hiring of more paralegals to assist the staff lawyers, or paying existing staff lawyers overtime if no additional staff lawyers are hired. All of these extra expenditures would cause the total costs of staff lawyers to rise. As long as the total costs of private bar lawyers fall by less than the total costs of staff lawyers rise, then average costs would rise overall. It seems plausible that the total costs of private lawyers would fall by relatively less than the rise in the total costs of staff lawyers because of the incentives of private bar lawyers. Private bar lawyers are already inclined to over-bill for services and unduly lengthen the time spent per case. If private bar lawyers were faced with fewer legal aid referrals, these incentives may be even more pronounced, especially for private bar lawyers who depend on legal aid referrals for a significant part of their income. The combination of total costs rising for staff lawyers and falling for private bar lawyers, with the first effect outweighing the second, may explain why average costs rise overall.

7 CONCLUSION

This paper set out to explore the puzzle of Canadian criminal legal aid programs. That is, why do some provinces have much higher costs than others? I initially hypothesized that because studies have shown that staff lawyers can provide services at lower costs on average than private bar lawyers, increases in the proportion of criminal legal aid cases referred to staff lawyers would be associated with falling costs. The closest we get to this original hypothesis is that average cost savings may be derived from referring more cases to staff lawyers for criminal legal aid programs with moderate caseloads, but not for relatively light or heavy caseloads. However, this result is not robust and is driven by a statistically insignificant variable. For other model specifications, the result we get is the opposite of the original hypothesis; we find that average costs rise as a higher proportion of criminal legal aid cases are referred to staff lawyers. We also find that the percentage of criminal legal aid cases referred to staff lawyers has no statistically significant relationship to per capita costs. Hence, the results of this empirical study do not support the original hypothesis. The likely reason for these initially surprising results is that by increasing the percentage of criminal legal aid cases referred to staff lawyers, provincial legal aid programs likely also have to incur additional costs, such as the hiring of new staff lawyers or paying existing staff lawyers overtime because of the already relatively heavy workloads of staff lawyers. At first, the results of this paper seem to contradict the theory that staff lawyers can provide criminal legal aid services at lower costs. However, the relative cost differences between staff lawyers and private bar lawyers are not what are actually being measured in this paper. We are really measuring the effect of increasing the percentage of cases referred to staff lawyers, holding everything else equal. It may be the case that staff lawyers can provide criminal legal aid services at lower costs on average, but that increasing the percentage of criminal legal aid cases referred to staff lawyers is associated with rising average costs. Consider

the following illustration. If we assume that average costs are lower for staff lawyers than private bar lawyers, we have:

$$\frac{TCs}{Ns} < \frac{TCp}{Np}$$

Regardless of the above expression, if referring a higher percentage of criminal legal aid cases to staff lawyers results in total costs for staff lawyers increasing by relatively more than the total costs to private bar lawyers are falling, then overall average costs will still rise. To really provide explanations for the cost differences among criminal legal aid programs, more research needs to be done. As I see it, there are two main avenues for future research on the costs of criminal legal aid. First, the staff-private lawyer cost issue merits further exploration with a better data set, preferably case level data. Second, there are other factors that could help to explain the relative cost differences of criminal legal aid programs that are not directly addressed in this paper including tariff rates and eligibility and coverage restrictions.

The first possible extension for future research is to address the issue of the relative cost of staff versus private bar lawyers with a more appropriate data set. The past studies addressed earlier all use case-level data. Case-level data would have allowed the actual costs of individual cases to be considered, controlling for whether the legal aid lawyer is a staff or private bar lawyer. Also, other important factors could have been taken into consideration, such as the length of time per case, whether a given case proceeded to trial or the client was pleaded, and the sentence given. One possible data set for such a study is case-level data from Quebec. Quebec has historically employed a successful, relatively low-cost mixed model of service delivery. Although at the aggregate level there is some specialization among staff lawyers, for example duty counsel is provided mainly by staff lawyers, staff and private bar lawyers are used interchangeably for many types of cases (Commission des services juridiques, n.d.). One possible study could involve a random sample of legal aid cases for a particular offence (such as indictable assault). Limiting the data set to only one type of offence would control for the complexity of cases. Case level data would allow for a more accurate estimate of the cost differences between staff and private bar lawyers.

The second potential avenue for future studies is to consider other factors that likely play important roles in determining the cost of provincial legal aid programs, including tariff rates and financial eligibility and coverage restrictions. In provinces with judicare models, changes in tariff rates can have significant effects on the cost of legal aid. For example, tariff rates were doubled in British Columbia in 1991 (Legal Services Society, 2005). This corresponds to a dramatic increase per capita real criminal legal aid expenditure between 1990 and 1991 and the start of steadily rising average direct criminal real expenditures. However, the relative effect of tariff changes may differ among the provinces. For example, Ontario is a high-cost province for all years surveyed but before 2003, the last tariff increase in Ontario was in 1987 (Legal Aid Ontario, 2001; Legal Aid Ontario, 2003). The 1987 Ontario tariff increase corresponds to slightly more pronounced increases in already-increasing per capita and average costs. The tariff increase in Ontario does not seem to have had as significant of an effect in Ontario as it did in British Columbia. The current provincial tariff rates may also help to explain some of the cost differences among provinces. For example, British Columbia and Alberta both use judicare models for criminal legal aid service delivery, but British Columbia is a notoriously high-cost province while Alberta has always had relatively lower costs. Table 11 in the appendices displays the tariff rates for half days at trial for both provinces. We can see from Table 11 that tariff rates are higher in British Columbia than Alberta for all types of cases on all trial days.[20] This large gap between the tariff rates likely plays a significant role in explaining why Alberta has such a low-cost judicare criminal legal aid program.

Eligibility and coverage restrictions may also significantly affect the relative costs of provincial criminal legal aid plans because they determine which cases are eligible for legal aid. Current eligibility and coverage restrictions were referred to and included in the appendices, but not included in the empirical analysis. Eligibility and coverage restrictions do change over time, sometimes as a method of budget control. For example, although criminal legal aid services were not directly affected, the Legal Services Society of British Columbia was forced to drastically scale back the range of services covered in

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[20] With the exception of the equivalent of a category I case after the 6th day of trail. Category I cases are the most minor and it is highly unlikely that one would last more than 6 days.

2002 (Sorensen, 2002). With respect to criminal legal aid coverage, provinces have to provide legal aid for serious offences because of the federal-provincial cost-sharing agreements, but have discretion in deciding which summary offences could possibly result in jail sentences and therefore need to be covered. Therefore, if coverage for criminal legal aid services needs to be scaled back, it is likely that representation for some relatively minor offences will no longer be provided. If these relatively minor cases tend to be less time-consuming on average, then average costs would rise. Intuitively, financial eligibility restrictions would likely have significant effects on per capita costs because as the restrictions become more relaxed, more people are eligible for legal aid, which would increase the number of cases and thus the per capita costs. It is therefore odd that New Brunswick, which is the only province without financial eligibility restrictions, is one of the highest average cost provinces but one of the lowest per capita cost provinces. Regardless, it would be interesting to explore the effects of changes in the financial eligibility and coverage restrictions on average and per capita costs in future studies.

This paper contributes to a small but growing literature on legal aid. I believe its strength lies in the fact that the costs of legal aid have never been examined empirically using OLS regressions in this manner. Legal aid is an important topic for Canadians because as a society, we view access to justice as a fundamental right. Legal aid essentially helps to correct the disparity between those who financially have access to justice and those who do not. As economists, we also know that because legal aid keeps the courts from being clogged up due to unrepresented individuals, it is more than just a transfer to the poor. Legal aid is essential for a functioning court system and it is therefore in the interests of the provinces to investigate factors that affect the costs of legal aid. Further study is certainly merited in this field.

APPENDICES

Tables

Table 1:   The Percentage of Total Criminal Direct Expenditure from Federal Funding

	NL	PE	NS	NB	QE	ON	MN	SA	AB	BC
1996	51.15	...	60.87	68.02	47.00	43.00	58.49	47.56	45.35	24.28
1997	49.15	59.85	63.15	74.76	46.49	49.41	49.13	46.71	52.01	28.49
1998	45.03	65.26	54.02	68.54	50.07	46.72	56.75	42.59	49.83	29.49
1999	46.83	51.63	43.66	68.42	51.15	43.52	49.56	39.40	47.04	28.80
2000	37.11	49.90	51.14	74.36	50.28	42.40	34.98	38.33	42.75	28.49
2001	...	58.68	49.30	70.86	47.25	39.57	41.23	38.03	45.61	32.24
2002	...	57.62	46.20	71.11	45.50	38.67	40.94	36.52	40.36	32.79
2003	37.78	53.70	42.45	70.22	47.88	33.32	31.53	34.98	40.08	30.15
2004	...	...	34.58	68.41	43.15	35.31	35.81	29.88	37.59	33.43
Ave	44.51	56.66	49.49	70.52	47.64	41.32	44.27	39.33	44.51	29.79

...- statistic is not available

Table 2:   **The Percentage of Approved Criminal Legal Aid Applications handled by Staff Lawyers**

	NL	PE	NS	NB	QC	ON	MB	SK	AB	BC
1996	...	82.89	91.74	0	46.33	0	22.47	98.19	13.09	16.82
1997	...	90.27	91.62	0	38.05	0	19.47	98.17	13.78	16.11
1998	...	91.76	88.47	0	36.83	0	19.03	97.84	12.35	17.09
1999	...	87.82	88.07	0	36.78	0	19.52	95.16	12.09	15.97
2000	98.67	88.73	86.02	0	39.68	0	15.88	95.57	11.47	16.48
2001	99.32	91.34	84.87	0.43	38.47	0	12.04	92.48	11.01	16.22
2002	99.61	91.32	83.30	0.43	36.67	0.08	42.79	95.61	10.72	3.55
2003	99.74	92.71	82.67	1.02	34.24	0.07	43.79	94.85	8.72	1.95
2004	...	90.57	84.19	58.61	33.63	0.51	42.15	92.76	8.73	2.08
ave	99.34	89.71	86.77	6.72	37.85	0.07	26.35	95.63	11.33	11.81

...- statistic is not available

Table 3:   The Classification of the Provinces into Judicare, Staff, and Mixed Models

	Percentage of approved criminal legal aid applications referred to staff lawyers	Provinces included
Judicare	Less than 20%	New Brunswick (1996-2003), Ontario, Alberta, British Columbia, Manitoba (1997-2001)
Mixed	Between 20% and 80%	Quebec, Manitoba (1996, 2002-2004), New Brunswick (2004)
Staff	Greater than 80%	Newfoundland and Labrador, Prince Edward Island, Nova Scotia, Saskatchewan

Table 4:   Coverage Restrictions for Criminal Legal Aid

	Federal Indictable Offences	Summary Conviction Offences	Young Offenders	Duty Counsel
NL	all	if conviction will likely result in a jail term or loss of means of earning a livelihood	all federal indictable and summary conviction offences	Brydges Duty Counsel
PE*	all	Summary offences covered, likelihood of imprisonment test may be used to limit services to minor matters	All indictable and summary offences, financial eligibility rules applied liberally in favor of young person	Staff lawyers give legal advice during business hours to applicants who may be financially eligible
NS*	all	Only if possibility of going to jail	Youths are covered	Only an informal service providing summary services
NB	all	Some- most of the refused have a low probability of jail if convicted	Covered by Department of Justice	Provided in all courts, also full service duty counsel
QE	all	Some- consider probability of imprisonment, loss of means of subsistence, best interest of justice	Youths are covered	Provided as a right by staff lawyers in all criminal courts
ON	If offence will likely result in jail time	Only if possibility of going to jail, lesser offences can "get help in the courtroom" (duty counsel)	Wider range of coverage because of Young Offenders Act	Yes, to those who meet a simplified income an asset test, people in custody and young offenders are excluded from testing
MN	all	Only if there is a likelihood of going to jail or losing a job	Same as adults	Available for criminal matters, full service duty counsel available for those denied certificates
SA	If offences will likely result in jail time or accused will lose job	If offences will likely result in jail time or accused will lose job	Any proceeding found in Young Offenders Act	Brydges Duty Counsel (phone service 24 hours/day, 7 days/ week)

	Federal Indictable Offences	Summary Conviction Offences	Young Offenders	Duty Counsel
AB	all	Only if a likelihood of imprisonment or loss of means to earn livelihood	Gross income of accused and parents is considered, if young person is found ineligible but desires counsel and is unable to retain one, Court Ordered Counsel Program comes into effect (via Minister of Justice for Alberta	Available at both adult and youth divisions of provincial court, no financial eligibility required
BC	If there is a likelihood of going to jail, face a conditional sentence that would severely limit liberty, lost means of earning a livelihood, or chance of being deported	If there is a likelihood of going to jail, face a conditional sentence that would severely limit liberty, lost means of earning a livelihood, or chance of being deported	Young people charged with federal offences are entitled to legal representation	Available without eligibility restrictions

Note- Where possible, coverage restrictions are current and were obtained from the websites of the various provincial legal aid programs or from correspondence with staff. Where the current coverage restrictions were not accessible, the missing entries were filled in using data from "Legal Aid Eligibility and Coverage in Canada" (Tsoukalas & Roberts, 2002).

Table 5:   Eligibility Restrictions for Criminal Legal Aid

	Max annual income level (full eligibility) for 1 person	asset test	Client Contributions	Expanded Eligibility
NL * (1997)	4,716 (net)	Yes- case by case basis	Yes, when area director feels client can contribute some part	no
PE* (2001)	14,176 (gross)	No- can be asked to liquidate if needed	Maybe- case by case basis	No
NS (1996)*	12,804 (gross)	Yes- case by case basis	Yes, when Commission feels a client can contribute	No
NB*	No set eligibility criteria		Yes- case by case basis	no
QE	9,695 (gross)	Yes- property schedule and liquid assets schedule	Yes- set scale	No* (switched in report)
ON	7,212 (net)	Yes- look at assets like cash, bank accounts, stocks, bonds and RRSP's	no	Yes- case by case basis
MN	14,000 (gross)	Yes- all assets are assessed	Yes- "Agreement to Pay" category, fixed monthly installments	Yes- repay full amount Legal Aid pays to lawyer, plus program fee
SA	9,420 (net)	Yes- look at all assets including cash, bank accounts, stocks, bonds, and RRSP's	Yes- if above social assistance, may be asked to contribute	no
AB	14,300 (gross)	No set guidelines	Yes- case by case basis, legal aid in Alberta is never free	Yes- have income range for applicants who will pay
BC	1,349 (MONTHLY, net)	Yes- 5 different asset categories	Eliminated after 2002, but still have recoveries from clients if financial situation of client changes	

Note- Where possible, eligibility restrictions are current and were obtained from the websites of the various provincial legal aid programs or from correspondence with staff. Where the current eligibility restrictions were not accessible, the missing entries were filled in using data from "Legal Aid Eligibility and Coverage in Canada" (Tsoukalas & Roberts, 2002).

Table 6:   Summary Statistics

		Observations	Mean	Standard Deviation	Minimum	Maximum
Average Direct Criminal Real Expenditure (AC)						
For all		84	773.14	419.82	295.54	1992.43
	NL	5	869.72	452.76	391.56	1436.31
	PE	7	405.31	62.73	311.68	509.67
	NS	9	542.30	61.92	459.05	667.20
	NB	9	1423.71	263.90	1122.54	1992.43
	QE	9	402.62	18.58	379.97	437.64
	ON	9	1336.84	170.78	1130.19	1685.21
	MN	9	633.41	126.47	479.20	840.46
	SA	9	373.10	71.74	295.54	490.04
	AB	9	562.73	38.48	524.72	630.87
	BC	9	1142.86	140.36	981.54	1395.38
%Staff						
For all		85	0.4345	0.3912	0	0.9974
	NL	4	0.9934	0.0048	0.9867	0.9974
	PE	9	0.8973	0.0294	0.83	0.9271
	NS	9	0.8680	0.0345	0.8267	0.92
	NB	9	0.0672	0.1946	0	0.5861
	QE	9	0.3782	0.0361	0.3364	0.46
	ON	9	0.0007	0.0017	0	0.0051
	MN	9	0.2629	0.1277	0.1204	0.4379
	SA	9	0.9561	0.0212	0.9248	0.9817
	AB	9	0.1132	0.0175	0.0872	0.1378
	BC	9	0.1182	0.7000	0.0195	0.1709

		Observations	Mean	Standard Deviation	Minimum	Maximum
Population						
For all		90	3065637	359208	135751	1.24e+07
	NL	9	532154	15298.89	517284	559807
	PE	9	136580	695.59	135751	137861
	NS	9	933804	2047.47	931413	937509
	NB	9	751116	965.62	749890	752543
	QE	9	7375806	103195	7246896	7547728
	ON	9	1.17e+07	468996.8	1.11e+07	1.24e+07
	MN	9	1148492	12339.5	1134188	1170229
	SA	9	1006887	10763.74	994300	1019100
	AB	9	3000037	148289.4	2775163	3204780
	BC	9	4045195	103769.7	3874276	4201867
Crime Rate						
For all		90	9655.981	2895.57	6208.93	17278.98
	NL	9	6505.92	228.03	6208.93	6818.99
	PE	9	8247.11	785.43	7052.77	9547.16
	NS	9	8874.63	444.24	8234.24	9448.22
	NB	9	7697.73	291.37	7185.9	8185.16
	QE	9	7072.11	491.19	6514.14	7935.63
	ON	9	7281.83	862.29	6287.75	8941.73
	MN	9	12279.2	783.25	11535.85	13667.55
	SA	9	15058.61	1336.77	13445.1	17278.98
	AB	9	10264.74	563.55	9565.12	11207.3
	BC	9	13277.93	786.65	12359.93	14849.41

		Observations	Mean	Standard Deviation	Minimum	Maximum
N						
For all		88	24128.81	26494.15	1019	91889
	NL	7	4226.14	2255.16	2560	7823
	PE	9	1121.22	61.26	1019	1193
	NS	9	9582.33	278.43	8996	9965
	NB	9	1353.67	156.45	1097	1638
	QE	9	84044.89	6088.26	77071	91889
	ON	9	60109.22	4297.78	51347	65279
.	MN	9	10680.67	2855.01	7959	15229
	SA	9	15686.11	1010.14	14197	16971
	AB	9	24418.22	2765.43	20646	27711
	BC	9	25642.78	3491.94	21404	31226
Low Income Cutoff						
For all		90	17.22	2.76	11.5	24.1
	NL	9	19.43	1.31	17.7	21.1
	PE	9	13.91	1.81	11.5	16.5
	NS	9	17.13	1.87	14.4	19.8
	NB	9	15.68	1.49	13.9	17.9
	QE	9	19.83	3.08	15.8	24.1
	ON	9	15.39	1.93	12.9	18.7
	MN	9	18.77	2.14	15.8	22.1
	SA	9	16.53	1.37	15.1	19.1
	AB	9	15.53	2.57	13.2	20.5
	BC	9	20	0.87	18.8	21.2

		Observations	Mean	Standard Deviation	Minimum	Maximum
Per Capita Real Criminal Direct Expenditure						
For all		85	5.22	1.53	2.09	8.69
	NL	6	6.09	0.66	5.47	6.96
	PE	7	3.29	0.44	2.64	3.87
	NS	9	5.56	0.68	4.78	7.09
	NB	9	2.53	0.32	2.09	2.90
	QE	9	4.59	0.38	4.08	5.08
	ON	9	6.81	0.50	6.30	7.80
	MN	9	5.70	1.03	4.32	7.40
	SA	9	5.77	0.87	4.74	7.34
	AB	9	4.57	0.44	4.02	5.16
	BC	9	7.16	0.64	6.40	8.69

Table 7: **Regressions with Real Average Direct Criminal Expenditure as the Dependent Variable and Robust Standard Errors (in brackets)**

Dependent Variable: Real Average Direct Criminal Expenditure (per case)						
	B	1	2	3	4	5	6
N	-0.047*** (7.04e-03)	-0.057*** (0.0132)	-0.111*** (0.0411)	-0.052*** (0.1321)	-0.158* (0.0587)	0.00219 (0.0136)	-0.1586* (0.0587)
N²	2.57e-07*** (6.18e-08)	2.99e-07*** (8.12e-08)	1.92e-06** (7.72e-07)	2.84e-07*** (7.43e-08)	2.77e-06** (1.09e-06)	-2.47e-07** (1.12e-07)	3.11e-06*** (1.09e-06)
S%	-418.27*** (81.63)	632.24*** (237.71)	512.44*** (122.89)	701.21*** (240.81)	456.59*** (133.96)	1049.24*** (149.25)	664.96*** (161.45)
N*S%				-0.0103 (0.00985)	0.012 (0.009)	-0.1082*** (0.0207)	-0.054 (0.0353)
N²*S%						1.23e-06*** (2.48e-07)	8.23e-07** (4.02e-07)
NL		-1063.91* (586.70)	400.48 (581.60)	-1066.45* (554.67)	-125.87 (767.69)	-681.28 (472.49)	-240.96 (752.21)
PE		-1920.50*** (568.48)	-1947.40** (804.69)	-1913.98*** (560.30)	-2630.76** (1054.28)	-1540.38*** (477.59)	-2730.33*** (1003.45)
NS		-1415.58*** (466.19)	-1771.02* (952.75)	-1374.14*** (451.64)	-2310.93* (1155.51)	-743.52* (399.68)	-2516.99** (1203.69)
NB		-409.99 (464.21)	-3.49 (670.33)	-353.55 (496.21)	-643.98 (903.55)	215.73 (466.48)	-639.62 (881.04)
QE		476.91 (451.30)	11632.14** (4821.10)	577.37 (438.32)	16912.44** (6795.56)	283.28 (392.48)	21122.9*** (6999.24)
ON		996.91 (796.32)	7229.23*** (2095.36)	954.26 (849.08)	9529.32*** (2935.35)	562.65 (807.69)	10696.6*** (2985.49)
MN		-1028.72*** (337.93)	-958.45* (484.53)	-1005.59*** (354.92)	-1425.10** (662.42)	-583.15* (335.77)	-1493.31** (637.65)
SA		-1538.59*** (366.14)	-2505.72*** (481.61)	-1458.60*** (380.57)	-2816.66*** (565.38)	-495.48 (353.93)	-2347.93*** (611.61)
AB		-411.63** (171.11)	-287.25 (282.54)	-413.26** (175.14)	-432.78 (317.77)	-492.45*** (169.34)	-33.72 (329.44)
pop	1.84e-04*** (1.63e-05)	7.84e-05 (1.123e-04)	3.83e-05 (7.61e-05)	6.33e-05 (1.121e-04)	3.59e-05 (7.55e-05)	3.67e-05 (1.104e-04)	6.2e-05 (8.07e-05)
crime	-2.48e-05 (0.0128)	0.033 (0.024)	0.012 (0.0167)	0.0321 (0.0241)	0.00567 (0.0179)	0.00833 (0.0229)	-0.0031 (0..0199)
lowinc	51.72*** (12.79)	8.012 (11.60)	20.80** (8.41)	11.32 (12.42)	18.81** (8.16)	13.14 (11.17)	18.40** (7.7599)

	B	1	2	3	4	5	6
Dependent Variable: Real Average Direct Criminal Expenditure (per case)							
NL*N			-0.632*** (0.0871)		-0.633*** (0.0865)		-0.5514*** (0.1014)
PE*N			-0.268 (0.423)		-0.183 (0.4329)		-0.0559 (0.3493)
NS*N			0.035 (0.0825)		0.057 (0.0875)		0.1228 (0.10207)
NB*N			-0.609*** (0.1913)		-0.587*** (0.1947)		-0.487** (0.1906)
QE*N			-0.219** (0.0896)		-0.317** (0.1267)		-0.399*** (0.1306)
ON*N			-0.149*** (0.0509)		-0.202*** (0.0686)		-0.244*** (0.0704)
MN*N			-0.0083 (0.0256)		0.011 (0.3311)		0.0419 (0.0321)
SA*N			0.075*** (0.0234)		0.081*** (0.0237)		0.0974*** (0.0226)
AB*N			-0.0054 (0.0106)		-5.75e-04 (0.0115)		-0.0166 (0.0126)
1997	-63.51 (110.47)	-36.40 (59.95)	-33.17 (34.18)	-43.92 (61.71)	-25.82 (32.12)	-19.46 (59.17)	-12.27 (35.31)
1998	13.05 (119.39)	3.00 (62.75)	17.03 (37.94)	-3.74 (65.69)	26.84 (39.39)	13.15 (61.38)	43.25 (40.04)
1999	65.87 (120.49)	43.07 (65.66)	72.48* (40.87)	37.85 (68.14)	80.14* (40.03)	50.20 (63.81)	88.25** (38.74)
2000	181.13 (124.49)	97.81 (77.49)	117.52** (50.11)	96.30 (79.98)	119.09** (47.73)	106.08 (71.69)	127.05*** (46.44)
2001	219.96* (119.32)	136.79 (82.21)	217.43*** (56.00)	138.69 (84.44)	222.68*** (54.25)	136.31* (77.49)	223.36*** (52.11)
2002	171.93 (107.04)	88.08 (81.31)	212.43*** (51.64)	86.62 (83.30)	220.54*** (49.89)	79.39 (75.70)	209.13*** (50.39)

Dependent Variable: Real Average Direct Criminal Expenditure (per case)							
	B	1	2	3	4	5	6
2003	285.92** (114.81)	133.08 (93.76)	268.82*** (68.85)	131.44 (96.03)	286.22*** (70.69)	148.40 (90.63)	283.91*** (75.50)
2004	376.64** (178.55)	151.50 (100.49)	263.96*** (67.09)	147.72 (103.11)	279.09*** (67.92)	146.95 (95.25)	260.06*** (70.18)
const	175.51 (233.51)	1363.91* (716.32)	1791.02 (632.63)	1262.62 (773.18)	2540.80*** (925.87)	771.85 (727.41)	2444.55** (939.04)
# of obs	81	81	81	81	81	81	81
R^2	0.7632	0.9673	0.9881	0.9678	0.9884	0.9745	0.9892

Table 8: **Regressions with Real Average Direct Criminal Expenditure as the Dependent Variable without Robust Standard Errors (t-stats in brackets)**

Dependent Variable: Real Average Direct Criminal Expenditure (per case)						
	1	2	3	4	5	6
N	-0.057*** (-5.37)	-0.111** (-2.34)	-0.052*** (-4.27)	-0.158** (-2.45)	0.00219 (0.12)	-0.1586** (-2.52)
N^2	2.99e-07*** (4.03)	1.92e-06** (2.12)	2.84e-07*** (3.74)	2.77e-06** (2.31)	-2.47e-07 (-1.58)	3.11e-06** (2.64)
S%	632.24*** (4.16)	512.44*** (3.70)	701.21*** (4.16)	456.59*** (3.09)	1049.24*** (5.93)	664.96*** (3.69)
N*S%			-0.0103 (-0.95)	0.012 (1.08)	-0.1082*** (-3.92)	-0.054 (-1.50)
N^2*S%					1.23e-06*** (3.79)	8.23e-07* (1.92)
NL	-1063.91** (-2.26)	400.48 (0.49)	-1066.45** (-2.26)	-125.87 (-0.13)	-681.28 (-1.57)	-240.96 (-0.26)
PE	-1920.50*** (-4.02)	-1947.40** (-2.32)	-1913.98*** (-4.00)	-2630.76** (-2.50)	-1540.38*** (-3.50)	-2730.33*** (-2.67)
NS	-1415.58*** (-3.71)	-1771.02* (-1.70)	-1374.14*** (-3.58)	-2310.93* (-2.01)	-743.52* (-1.94)	-2516.99** (-2.24)
NB	-409.99 (-0.97)	-3.49 (0.00)	-353.55 (-0.83)	-643.98 (-0.70)	215.73 (0.53)	-639.62 (-0.72)
QE	476.91 (1.44)	11632.14** (2.06)	577.37 (1.66)	16912.44** (2.27)	283.28 (0.88)	21122.91*** (2.78)
ON	996.91 (1.44)	7229.23*** (2.96)	954.26 (1.38)	9529.32*** (2.94)	562.65 (0.89)	10696.58*** (3.33)
MN	-1028.72*** (-3.42)	-958.45* (-1.84)	-1005.59*** (-3.33)	-1425.10** (-2.11)	-583.15* (-1.99)	-1493.31** (-2.27)
SA	-1538.59*** (-5.30)	-2505.72*** (-4.41)	-1458.60*** (-4.82)	-2816.66*** (-4.43)	-495.48 (-1.33)	-2347.93*** (-3.53)
AB	-411.63** (-2.38)	-287.25 (-0.83)	-413.26** (-2.39)	-432.78 (-1.17)	-492.45*** (-3.14)	-33.72 (-0.08)

Dependent Variable: Real Average Direct Criminal Expenditure (per case)						
	1	2	3	4	5	6
pop	7.84e-05 (0.72)	3.83e-05 (0.45)	6.33e-05 (0.57)	3.59e-05 (0.42)	3.67e-05 (0.37)	6.2e-05 (0.74)
crime	0.033 (1.36)	0.012 (0.64)	0.0321 (1.34)	0.00567 (0.29)	0.00833 (0.37)	-0.0031 (-0.16)
lowinc	8.012. (0.58)	20.80** (2.10)	11.32 (0.79)	18.81* (1.87)	13.14 (1.02)	18.40* (1.88)
NL*N		-0.632*** (-3.59)		-0.633*** (-3.60)		-0.5514*** (-3.13)
PE*N		-0.268 (-0.67)		-0.183 (-0.45)		-0.0559 (-0.14)
NS*N		0.035 (0.38)		0.057 (0.59)		0.1228 (1.24)
NB*N		-0.609*** (-3.12)		-0.587*** (-3.00)		-0.487** (-2.47)
QE*N		-0.219** (-2.08)		-0.317** (-2.28)		-0.399*** (-2.81)
ON*N		-0.149** (-2.46)		-0.202** (-2.60)		-0.244*** (-3.10)
MN*N		-0.0083 (-0.29)		0.011 (0.34)		0.0419 (1.15)
SA*N		0.075** (2.48)		0.081** (2.64)		0.0974*** (3.13)
AB*N		-0.0054 (-0.42)		-5.75e-04 (-0.04)		-0.0166 (-1.07)
1997	-36.40 (-0.79)	-33.17 (-1.05)	-43.92 (-0.93)	-25.82 (-0.80)	-19.46 (-0.46)	-12.27 (-0.38)
1998	3.01 (0.06)	17.03 (0.43)	-3.74 (-0.07)	26.84 (0.66)	13.15 (0.28)	43.25 (1.06)
1999	43.08 (0.74)	72.48* (1.70)	37.85 (0.65)	80.14* (1.85)	50.20 (0.96)	88.25** (2.09)
2000	97.81 (1.53)	117.52** (2.41)	96.30 (1.50)	119.09** (2.45)	106.08* (1.84)	127.05*** (2.67)
2001	136.79* (1.83)	217.43*** (3.91)	138.69* (1.85)	222.68*** (4.00)	136.31** (2.03)	223.36*** (4.13)
2002	88.09 (1.24)	212.43*** (4.01)	86.62 (1.22)	220.54*** (4.13)	79.39 (1.24)	209.13*** (4.00)

62

Dependent Variable: Real Average Direct Criminal Expenditure (per case)						
	1	2	3	4	5	6
2003	133.08 (1.65)	268.82*** (4.55)	131.44 (1.63)	286.22*** (4.68)	148.40** (2.05)	283.91*** (4.77)
2004	151.50 (1.66)	263.96*** (3.99)	147.72 (1.62)	279.09*** (4.14)	146.95* (1.79)	260.06*** (3.92)
const	1363.91* (1.98)	1791.02** (2.45)	1262.62* (1.81)	2540.80** (2.52)	771.85 (1.21)	2444.55** (2.49)
# of obs	81	81	81	81	81	81
F	$F_{(23,57)}$ =96.45	$F_{(32,48)}$ =124.23	$F_{(13,67)}$ =70.13	$F_{(33,47)}$ =120.92	$F_{(25,55)}$ =83.99	$F_{(34,46)}$ =124.13
R^2	0.9673	0.9881	0.9678	0.9884	0.9745	0.9745
adjR^2	0.9541	0.9801	0.9540	0.9802	0.9629	0.9629

Table 9:   Provincial Average Cost Functions

	AC function	Nopt	Actual N average (over 9 years)
NL	$3.928\text{e-}06N^2 - 0.7636N + 3234.50$	97199	4226
PE	$3.848\text{e-}06N^2 - 0.2629N + 549.73$	34160	1121
NS	$3.824\text{e-}06N^2 - 0.0827N + 850.32$	10813	9582
NB	$3.165\text{e-}06N^2 - 0.6492N + 2160.83$	102559	1353
QE	$3.421\text{e-}06N^2 - 0.5780N + 24610.99$	84478	84044
ON	$3.111\text{e-}06N^2 - 0.4026N + 14127.59$	64705	60109
MN	$3.326\text{e-}06N^2 - 0.1309N + 1504.57$	19678	10680
SA	$3.897\text{e-}06N^2 - 0.1128N + 1052.28$	14472	15686
AB	$3.203\text{e-}06N^2 - 0.1813N + 2926.04$	28301	24418
BC	$3.207\text{e-}06N^2 - 0.1649N + 3100.74$	25709	25642

Table 10: Regressions with Real Per Capita Direct Criminal Expenditure as the Dependent Variable and Robust Standard Errors (in brackets)

Dependent Variable: Real Per Capita Direct Criminal Expenditure				
	B	1	2	3
N	-4.51e-05*** (7.87e-06)	0.0000386 (2.53e-05)	0.0002813*** (5.22e-05)	0.0002801*** (5.01e-05)
S%	1.54*** (0.303)	0.1517 (0.7332)	-0.9274 (0.703)	-0.9568 (0.846)
N*S%				3.77e-06 (3.47e-05)
NL		2.03 (2.226)	10.68*** (1.712)	10.69*** (1.745)
PE		-1.81 (2.347)	6.79** (3.066)	6.74 (3.24)
NS		-0.0985 (1.808)	4.21 (7.157)	4.21 (7.16)
NB		-2.19 (2.29)	3.92* (2.139)	3.89* (2.23)
QE		-1.23 (2.006)	6.27** (2.844)	6.27** (2.89)
ON		3.44 (3.80)	13.91*** (4.016)	13.93*** (4.16)
MN		-1.34 (1.617)	4.56** (1.776)	4.54** (1.825)
SA		-2.68* (1.428)	4.81* (2.446)	4.79* (2.47)
AB		-1.42* (0.819)	6.39*** (1.642)	6.36*** (1.639)

Dependent Variable: Real Per Capita Direct Criminal Expenditure				
	B	1	2	3
pop	6.01e-07*** (4.79-08)	-3.12e-07 (5.37e-07)	-2.78e-07 (4.77e-07)	-2.84e-07 (5.07e-07)
crime	2.87e-04*** (4.69e-05)	0.0004172*** (1.08e-4)	0.00026*** (9.44e-05)	0.0002583** (1.032e-04)
lowinc	0.273*** (0.053)	0.0442 (0.0518)	0.1211** (0.046)	0.1198** (0.050)
NL*N			-0.0011** (4.847e-04)	-0.0011 (5.613e-04)
PE*N			-0.0018 (0.0019)	-0.0018 (0.0019)
NS*N			3.65e-06 (6.98e-04)	-2.28e-06 (6.77e-04)
NB*N			-0.00052 (8.78e-04)	-0.00054 (9.14e-04)
QE*N			-0.0002674*** (5.56e-05)	-0.0002677*** (5.74e-05)
ON*N			-0.0003297*** (6.15e-05)	-0.0003287*** (5.98e-05)
MN*N			-0.0001941** (9.45e-05)	-0.0001954* (9.82e-05)
SA*N			-0.00022* (1.16e-04)	-0.0002268* (1.23e-04)
AB*N			-0.0003116*** (6.29e-05)	-0.0003111*** (6.21e-05)
1997	-0.258 (0.424)	-0.209 (0.255)	-0.102 (0.202)	-0.1007 (0.206)
1998	0.093 (0.441)	-0.188 (0.272)	0.052 (0.234)	0.0518 (0.236)
1999	0.533 (0.427)	0.108 (0.284)	0.404* (0.241)	0.404 (0.243)
2000	1.155** (0.502)	0.408 (0.339)	0.798** (0.318)	0.796** (0.320)
2001	1.54*** (0.467)	0.646* (0.336)	1.24*** (0.299)	1.237*** (0.299)

Dependent Variable: Real Per Capita Direct Criminal Expenditure				
	B	1	2	3
2002	1.34*** (0.491)	0.556* (0.333)	1.22*** (0.303)	1.218*** (0.308)
2003	1.65*** (0.522)	0.586 (0.379)	1.349*** (0.383)	1.353*** (0.396)
2004	1.663** (0.669)	0.656 (0.472)	1.538*** (0.424)	1.542*** (0.449)
Const	-4.68*** (0.974)	0.71 (3.59)	-5.41* (2.838)	-5.32 (-1.41)
# of obs	81	81	81	81
R^2	0.7689	0.9442	0.9653	0.9653

Table 11: Tariff Rates for half days at trial in British Columbia and Alberta

British Columbia		Alberta	
First two half days (cat I, II, and III)	Cat I- $500 Cat II- $600 Cat III- $800	First half day	$465
Subsequent half days (cat I, II, and III)	Cat I- $300 Cat II- $400 Cat III- $500	Second through fifth half day	$234
cat IV- all half days	$700	Sixth half day and after	$315

Note- The above trial tariff rates are current and can be found in The Legal Aid Society of Alberta Tariff of Fees (2004) and The Legal Services Society Criminal Tariff (January 2006)

Figures

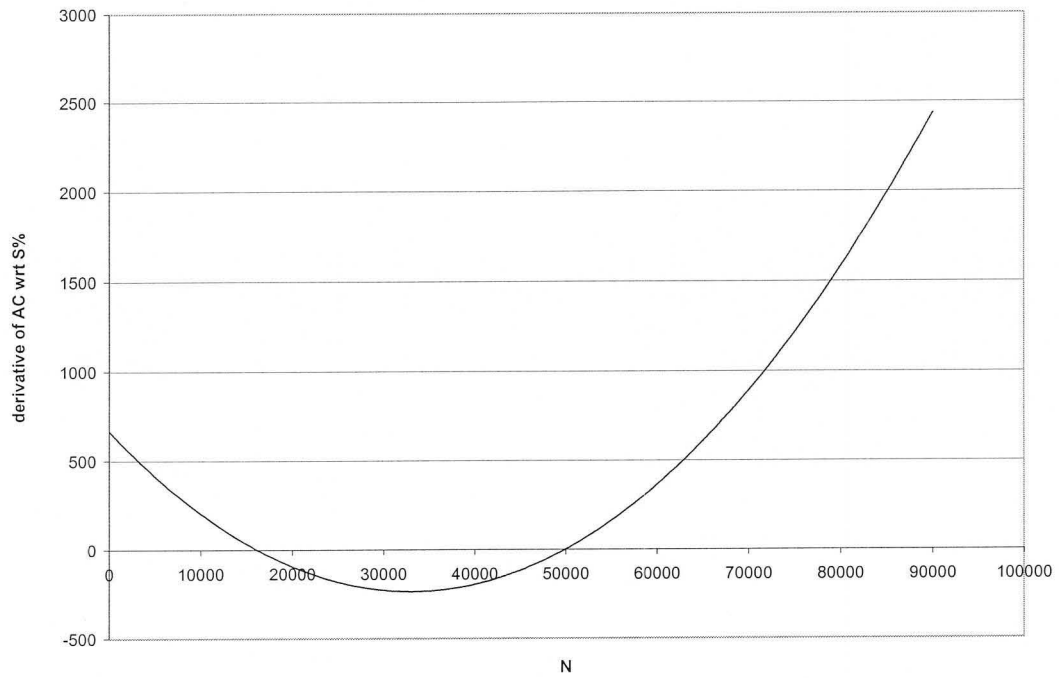## Figure 3:   The Derivative of *AC* with respect to *S%*

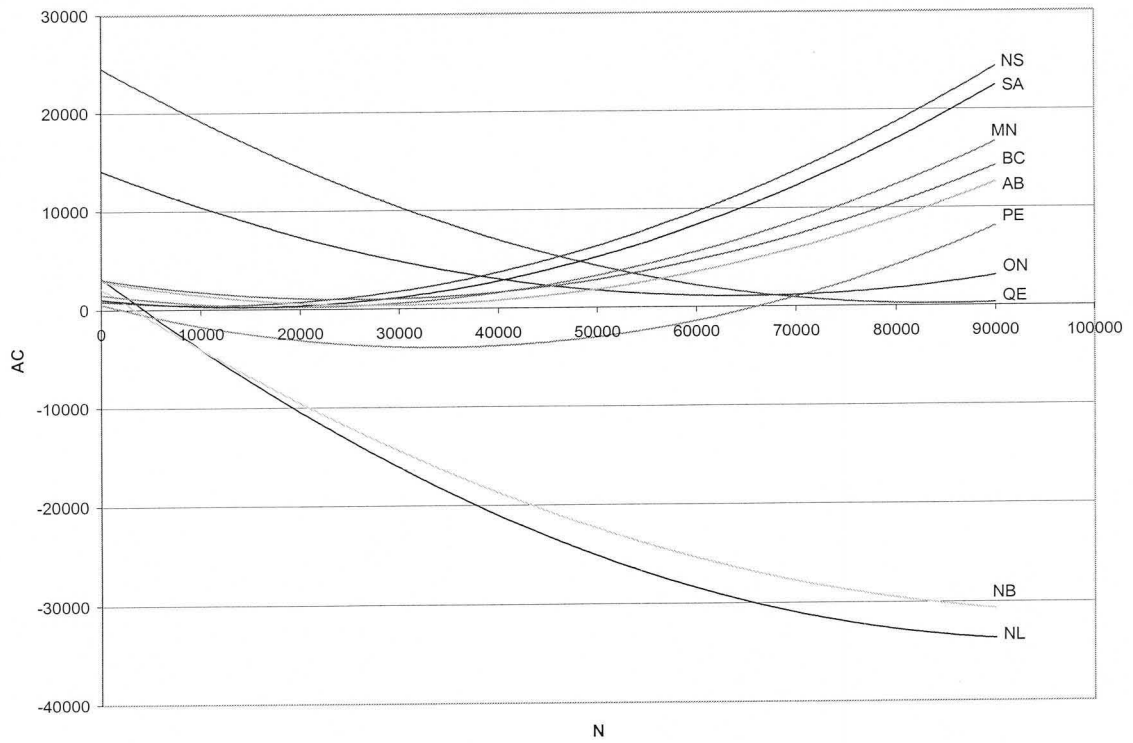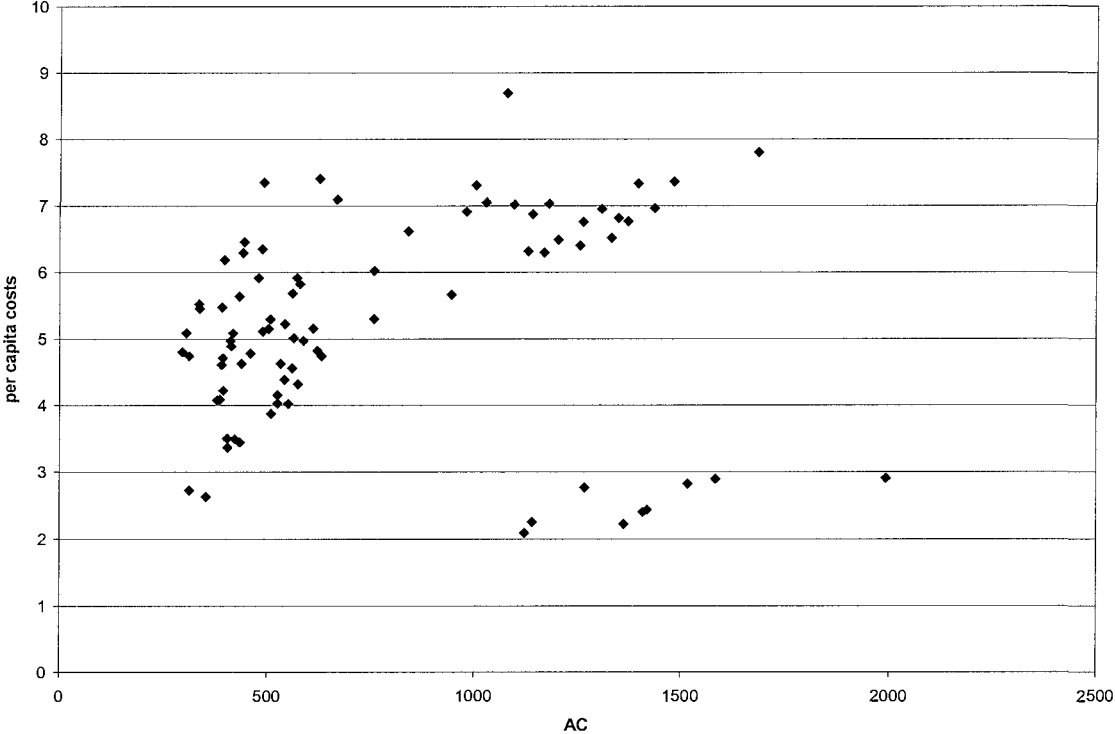**Figure 4:   Provincial AC Curves**

Figure 5: Scatterplot of Average Cost and Per Capita Cost

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