Judicial Reform in Latin American Courts
The Experience in Argentina and Ecuador

Edgardo Buscaglia
Maria Dakolias
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Judicial Reform in Latin American Courts

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Edgardo Buscaglia
Maria Dakolias

The World Bank
Washington, D.C.
FOREWORD

A well functioning judiciary is an essential factor in strengthening the rule of law and the role of the state as its guarantor. In this sense, judicial reform is an integral part of institutional development and a key element in private sector development. Consistent interpretation and application of the laws by the courts provide a stable institutional environment where the long term consequences of economic decisions can be assessed by businesses and the public. However, the judiciaries in many countries suffer from a lack of predictability, and increasing backlogs and delays in resolving cases, which increase the costs of access to justice and doing business. Market reforms have created additional demands for court services in many developing countries, including those countries in the Latin America Region. This has increased the complexity of social interactions, thereby making the need for conflict resolution even more necessary. Judicial reform programs aim to improve the effectiveness of the judiciary, especially in enforcing private sector transactions and in promoting transparency and accountability of government actions.

Although supporting judicial reform is a relatively new area of involvement for the World Bank, it has been the Bank's experience that research work is critical in identifying the specific issues and problems causing the inefficiencies in the judicial system of a specific country and in designing meaningful reform programs. This paper contributes to this diagnostic work by providing a quantitative framework within which the efficiency and equity of a judicial system can be assessed. The experiences of Argentina and Ecuador are analyzed under this framework. As the World Bank continues assisting its member countries to identify and implement legal and judicial reform, this type of framework may serve as a useful tool to analyze the elements and assess the effects of judicial reform programs.

Ibrahim F. I. Shihata
Senior Vice President and General Counsel
The World Bank

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ABSTRACT

This paper addresses the importance of an efficient and equitable judiciary on economic decisions. It addresses some of the main obstacles to a well-functioning judiciary and how to assess which reforms may assist in alleviating these obstacles. In addition, it provides a methodology by which to assess the impact of judicial reform programs being implemented in a country. Specifically, this paper develops a quantitative framework within which the efficiency and equity of a judicial system can be assessed. The experiences of the judicial systems in Argentina and Ecuador are analyzed within this framework as case examples. Part I of this paper provides a descriptive analysis of the problem of delays in resolving cases in the judiciary. Part II describes the main factors associated with the time to disposition of a case in the two case studies. As a result, Reform programs based on these factors should lead to an improvement in the functioning of the judicial system. Part III develops benchmarks based on standard quality control techniques for the resolution of cases. The benchmarks can serve as performance indicators for the resolution of specific types of cases. In addition, such benchmarks permit the monitoring and evaluation of how judicial reform programs affect the time to resolve a case.
INTRODUCTION

A widespread belief that the judicial sector is neither prepared to foster private sector development within a market system nor able to provide access to justice for a vast majority of the population exists throughout Latin America. This decline in the administration of justice manifests itself through unprecedented delays in case processing, increasing backlogs, the public’s perception of corruption within the courts, and increasing uncertainty associated with judges' rulings. The courts' failure to resolve cases in a timely manner has tended to diminish the citizens' willingness and ability to access justice. The public perceives that the time required by a typical civil case in court is excessive. This perception is shared by most judges, lawyers, litigants, and the general population. The term "excessive," can be explained through the cost to society as well as the high consequential damages imposed on individuals and businesses by the prolonged times to disposition encountered when filing a case in court. The costs associated with a weak judicial system can be attributed to three sources: first, the loss in property-right value due to the lack of predictable enforcement of the rules; second, the added transaction costs of contracting in an environment with dysfunctional third party adjudication and corruption; and third, the value of the economic opportunities foregone due to the high risk involved or the lack of access to the courts (this is an invisible cost).

As a result of the distrust in the judicial system and the inability of the courts to perform their functions, the judiciary is in a state of crisis. This crisis manifests itself in terms of losses in the efficiency of the courts and a decrease in the public’s access to the judiciary. Delays also explain the court officers' incentive to demand illegal side payments from court users (i.e. the use of public office for private benefits). As mentioned in Klitgaard (1991), corrupt behavior in the courts as well as in the other branches of government can slow economic growth and discourage foreign investment. In this context,

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1 A recent Gallop poll in Argentina found that only 13% of the population consider the judiciary an effective institution. See Argentina: Judicial Sector Review financed by the World Bank through an Institutional Development Fund Grant (IDF), published October 1995.

2 Argentina: Judicial Sector Review, Supra 1.

3 see Oxford Analytica: Latin America: Corrosive Corruption, March 26, 1996

the joint pernicious impact of delay and corruption has generated demands from the media and business community for the establishment of a more efficient and transparent judicial system and for taking forceful action against corrupt behavior.

In this paper, Part I provides a quantitative and qualitative description of the current situation within the Latin American judiciary. Part II provides a quantitative assessment of the Argentine and Ecuadoran courts by analyzing the caseloads, expected times to dispositions and proportion of cases terminated in one year. Part III advances the identification of the factors associated to the poor court performance in Argentina and Ecuador. In summary, the main factors that were found to have an effect on delays are the number of filings, case management, court personnel and complexity of the case. Finally, Part IV proposes a quality control approach to the improvement of court services. That is, benchmarks are established for Argentine and Ecuadoran courts to measure the time a case takes from filing to disposition. Such benchmarks can be useful in measuring the success of judicial reform programs.

corruption, where there is extensive government control and regulation and where corruption accepted and tolerated by society. The attitudes in Argentina have changed. In 1990 only 3% of those interviewed said that corruption was an urgent problem, and in 1993 corruption became the second or third priority for the government to tackle. Id at 29.

5 Id. Manzetti and Blake at 32.
PART I

Latin America and Its Courts: A Tale of a Crisis

Courts struggle almost everywhere to satisfy the demand for dispositions in civil jurisdictions. The inability to satisfy this demand manifests itself through increasing backlogs and time delays observed throughout the region. Generally, court delay is time spent before case disposition that simply extends case development and processing beyond a reasonable point. This so-called “reasonable point,” however, is dependent upon the resources available to the courts and to the increases in the demand for court services observed within each case type after taking into account factors such as economic and population growth. Within Latin American courts, times to disposition have been increasing and reaching unprecedented levels since 1987. For example, the 1993 median times to disposition in the civil jurisdictions of Argentina, Ecuador, and Venezuela are 2.5, 1.9, and 2.4 years respectively. These times to disposition have increased 76 percent since 1987. The variability in these times to disposition has also been increasing at an alarming rate during the past decade showing a huge lack of uniformity in the quality of the services provided within each of the countries herein considered.

The following chart compares the percentage changes in delays and backlogs in a joint assessment of the civil and commercial jurisdictions of selected Latin American

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6 For example, even in Canada, the number of civil cases increased by 68% from the late 1980's until the 1990's. Civil Justice Review, First Report March 1995, Ontario Court of Justice and the Ministry of Attorney General at 58. In March 1995, there were 23,303 cases pending at the trial court level and of these 57% were pending for more than 12 months. Id. at 57. Judges cite that they are unable to meet the demand because of the growing complexity of the law, of the cases, constant legislative changes, and new interpretations by the higher courts. Id at 89.

7 There is a need to define what delay is. For example, in an Ontario study, delay was defined as a case waiting for trial for more than nine months. We will propose an alternative definition later in this paper. Id at 157.


9 Edgardo Buscaglia and Maria Dakolias, "Judicial Reform in Latin America: Economic Efficiency vs. Institutional Inertia," Working Paper Series, Econ-2377-06-495, School of Business Administration, Georgetown University (1995) at 25. Several countries have undertaken deep reforms of their courts' administrative and management dimensions in order to improve their court performance. For example, in the United States, the median time to dispose of tort case by jury trial is 748 days. Brian J. Ostrom and Neal B. Kauder, Examining the work of State Courts, 1994 A Perspective from the Court Statistics Project, National Center for State Courts 1996,at 35. Fifty-one percent of the cases take more than two years to be disposed and one out of ten take more than five years. In Singapore, prior to the recent reforms, the time needed to process a case was five years and two years more for an appeal. After the reforms an appeal case took 223 days in 1993. Supreme Court Singapore The Reorganization of the 1990’s the Supreme Court of Singapore, September 9, 1994 at 82,85.

10 Id at 11.
countries. The average changes in the median times to disposition clearly show a pronounced deterioration for the period 1983-93 compared to the period 1973-82. These numbers show that each of the countries considered has experienced a deterioration in performance quality. The reasons for the public's dissatisfaction with the judicial systems throughout the region can be understood from these quantitative results. In fact, surveys show that public confidence in the judiciary is low in Argentina, Peru, Ecuador, Honduras, Guatemala, El Salvador and Panama. Moreover, the majority of the public in these countries is "not inclined" to bring disputes to court, the common perception of the system being that it is slow, uncertain, and costly, or, in other words, of "poor quality."  

11 Generally surveys and polls are needed in order to assess the population's overall confidence in the justice system as a proxy for the court users' perception of quality. Lack of public confidence is not a problem limited to Latin America. In comparison, 44% of those polled in Ontario strongly agreed that they would not even try to dispute most legal conflicts because the cost is too high. For instance, the costs of a three day trial in Ontario is approximately $38,200.00. Civil Justice Review, Supra note 6 at 178, 144.
CHART 1

<table>
<thead>
<tr>
<th>Country</th>
<th>% Change in Median Delay 12</th>
<th>% Change in Backlogs</th>
<th>1973-82</th>
<th>1983-93</th>
<th>1973-82</th>
<th>1983-93</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>7</td>
<td>18</td>
<td>9</td>
<td>28</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brazil</td>
<td>6</td>
<td>19</td>
<td>2</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chile</td>
<td>8</td>
<td>11</td>
<td>12</td>
<td>29</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colombia</td>
<td>3</td>
<td>8</td>
<td>9</td>
<td>28</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Venezuela</td>
<td>3</td>
<td>28</td>
<td>12</td>
<td>31</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This increase in the times shown above may partly be symptomatic of insufficient resources devoted to the courts analyzed here or may be due simply to procedural defects. Other reasons must also be considered, however, such as the lack of legal training, the absence of an active case management style or even the excessive administrative burden falling on judges.

The casetype also determines times to disposition and the likelihood of corrupt influences. More specifically, cases where: (1) higher stakes exist; (2) complicating factors such as contract language subject to diverse interpretation by many litigants; (3) and cases where greater uncertainty and differences of opinion about the expected outcome exist. All these three factors tend to diminish the parties' incentive to settle and, therefore, contribute to costly court delays and illegal side payments aimed at court officials. Increasing times to disposition and illegal payoffs hamper access to justice, measured in terms of time, money,

12 We present our results in terms of average percentage yearly changes in the median times to disposition. In this way, we can assess the evolution of the most representative courts over time. Buscaglia and Dakolias, Judicial Reform in Latin America: A Framework for National Development. (1995) Stanford University, Essays in Public Policy at 9.

13 We address the need to add more resources to the courts later in this paper. In the United States, for example, increased activity in drug enforcement in the 1980’s lead to many courts moving judges from civil to criminal calendars coupled with the economic recession of the early 1990’s may have contributed to the insufficient resources available for civil cases. John A. Goerdt Divorce Courts Case Management: Case characteristics and the pace of litigation in 16 Urban Jurisdictions. (1992) National Center for States Courts at 72.

14 For example, Dakolias (1994) has found that approximately 70 percent of judges’ time in Argentina and Ecuador is spent on non adjudicative tasks. The same administrative duties occupy 65 and 69 percent of available judicial time in Brazil and Peru respectively. Excessive administrative requirements are not just imposed on judges. Based on recent surveys of the courts in Ecuador, Venezuela, Peru, and Argentina, between 20 and 40 percent of the court officers interviewed seem to welcome tasks, such as signing checks or requesting office supplies. The main reason may be due to the fact that administrative duties gives judges a sense of budgetary autonomy. See Buscaglia and Dakolias, supra note 9 at 4.
and procedural requirements, faced by citizens.\textsuperscript{15} Simultaneously, the longer a case is pending in the courts within commercial jurisdictions, the greater the drain on judicial resources.\textsuperscript{16} Longer times to dispositions within commercial jurisdictions also add cost and risk to business transactions, thereby reducing economic activity.

Crucial to the implementation of a judicial reform program is the full understanding of the causes and consequences of increasing times to disposition. The expected time to dispose of a filed case influences the strategy for litigation (cost to one party and benefit to the other), aids in the analysis of the efficiency of the legal system, provides information needed in the formation of policy for improving judicial administration, helps to determine the relative efficiency of various courts and administrative tribunals in adjudicating cases, and provides a valuable aid in assigning cases and staffing courts.

Before implementation of any administrative reform of the courts an empirical study of the main factors associated to the times to disposition observed needs to be conducted on a country by country basis. Moreover, the identification of these factors would allow the courts to focus their attention on specific areas in need for improvement, thereby increasing their ability to satisfy the demand for dispositions. This paper represents the first quantitative analytical attempt to study the factors strongly associated to the lack of efficiency observed within the judiciary.\textsuperscript{17}

The main purpose of Part II is to identify the procedural times and the common factors associated with those times in Argentina and Ecuador. It also demonstrates that the slow disposition of cases in the Argentine and Ecuadorian courts is a phenomenon that can

\textsuperscript{15} Buscaglia and Dakolias \textit{supra} note 9 at 27.

\textsuperscript{16} National Center for State Courts, \textit{N.2} 1993.

\textsuperscript{17} Despite widespread concerns about the problems besetting the courts, no previous studies have conducted an empirical procedural microanalysis of the factors associated with the times to disposition. Instead, previous studies have used statistical macroanalysis to describe only aggregated data for case filings, pending cases, and disposition of cases. To date, no study has undertaken a micro-empirical analysis of each of the procedural steps for each case type within different courts. We use this microanalysis to identify procedural bottlenecks and pinpoint their origins. See Buscaglia and Dakolias, \textit{supra} note 9.
be attributed to the courts' intrinsic operation as well as to the users of the courts' (i.e. litigants and their lawyers) pernicious behavior. The quantitative identification of the main factors associated with their increasing times to disposition allows the judiciary to pinpoint specific areas in need of reform, including the improvement of court administration. Moreover, the application of this approach enhances the courts' planning capabilities to satisfy future demand by individuals and businesses.
PART II

A Quantitative Assessment of the Performance of the Judicial Sectors in Argentina and Ecuador18

An Overview of the Caseloads in the Courts

The court and user-related factors responsible for the changes in the times to disposition and backlogs experienced by the Argentine Federal District's National Court of First Instance since 1983 and the Ecuadorian First Instance Courts in Quito since 1989 are the focus of Part II. The workload of the civil trial courts in Argentina and Ecuador has steadily grown during the past decade. This has to some extent caused these courts to take much longer to dispose of cases.

In Argentina, the judicial statistical reports indicate the number of pending cases in the entire system went from over 880,000 in 1991 to over 1,200,000 in 1993. The 1994 backlog was expected to exceed the 1,400,000 mark. Moreover, the ratio of pending to disposed cases has been dramatically increasing from 9 to 20.4 and 3 to 7 since 1991 within the civil and commercial jurisdictions, respectively. During the same time, the median duration of a case within the National Courts was 5 years for first instance civil cases and 2.3 years in the commercial jurisdiction, showing that only 30 percent of all the cases filed were being disposed. This suggests that the unprecedented backlog and court delays continue to increase. The severity of the situation affecting all Argentine jurisdictions during 1991-93.19 is illustrated in Chart 2, below.

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18 The methodology used here was first developed in Buscaglia, Edgardo and Thomas Ulen, "A Quantitative Assessment of the Judicial Sectors in Latin America," International Review of Law and Economics (1996).

19 Argentina is a federal republic, which implies coexistence of a province-federal system. In the federal capital, however, trial courts are called national courts because all laws that govern these national courts emanate from the national congress. In this case, the federal government makes law applicable just to the federal capital in the same way as the provincial governments enact laws applicable to their courts.
## CHART 2

### ARGENTINA

**CASES PER JUDGE AND DISPOSITIONS AS A PERCENTAGE OF FILINGS**

<table>
<thead>
<tr>
<th>FIRST INST.</th>
<th>1991 Filings per Judge</th>
<th>1991 Dispositions as a % of Filings</th>
<th>1992 Filings per Judge</th>
<th>1992 Dispositions as a % of Filings</th>
<th>1993 Filings per Judge</th>
<th>1993 Dispositions as a % of Filings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial (CF)</td>
<td>1652</td>
<td>61</td>
<td>2044</td>
<td>42</td>
<td>2883</td>
<td>48</td>
</tr>
<tr>
<td>Civil (CF)</td>
<td>585</td>
<td>21</td>
<td>468</td>
<td>26</td>
<td>452</td>
<td>20</td>
</tr>
<tr>
<td>Labor (CF)</td>
<td>863</td>
<td>72</td>
<td>683</td>
<td>95</td>
<td>543</td>
<td>93</td>
</tr>
<tr>
<td>Civil &amp; Comm (NF)</td>
<td>954</td>
<td>99</td>
<td>864</td>
<td>118</td>
<td>990</td>
<td>104</td>
</tr>
</tbody>
</table>

*CF = Capital Federal  
*NF = National Federal

Chart 2 demonstrates that the Federal District’s National Courts of First Instance (civil, commercial, and labor) are the most overburdened and less productive of all district courts in the nation, and the situation has been deteriorating since 1991. Filings are the work input to the court system, and dispositions are a measure of the work output. When dispositions as a proportion of filed cases (DISP/FIL) show an index greater than 100, this indicates that the median court is reducing its backlog. An index lower than 100 indicates that pending cases are increasing. For example in 1993 the Civil Trial Courts were only disposing 20% of the cases filed while the median number of filings per judge decreased. This demonstrates a decrease in civil-court productivity. As a comparison, the dispositions as a percentage of civil filings in the United States State Courts range from 81-117%.^{20}

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^{20} Out of the forty-three state courts half of the filing to dispositions were 99% or more between 1992-94. Out of the top ten courts eight had negative growth rates for civil filings. However, twenty of the courts experienced drops in the civil caseloads. Ostrom and Kauder (1996) supra note 9 at 27.
In Ecuador the number of cases pending since 1990 has steadily increased. One source estimates that there are 500,000 cases backlogged in the whole judicial system.\textsuperscript{21} This may be in part due to the fact that the median caseload per court increased from about 2,900 in 1990 to more than 4,100 in 1994.

Graph 1 above shows that as the number of cases filed continues to increase, the productivity of judges is not adjusting to the increased load because the courts are unable to react quickly enough to dispose of them. Graph 1 also indicates that cases resolved per year have barely been affected. As a result, the proportion of the cases disposed to those filed has decreased in most jurisdictions. The filing to disposition indicator is a crucial means of assessing the impact of an increasing demand for court services. The inability to satisfy this demand manifests itself through the increasing backlogs and increases in the times to disposition observed.

The increase in the number of cases being filed in the courts of Argentina and Ecuador can be linked to a number of macro-reasons. First, there has been a steady increase in social development in both Argentina and Ecuador, where civil society imposes the need to internalize individual and property rights. Increased demand for court services may also be explained by other sociological forces. Specifically, with the liberalization and increased pluralism within civil society, additional cases related to family issues and

22 However, many studies in the United States have concluded that the number of filings per judge is not associated with the pace of litigation in general jurisdiction courts. But the number of pending cases per judges is correlated strongly to time to disposition. Divorce Courts, supra note 13 at 19, 80.
individual rights have experienced unprecedented increases. The constant restructuring of the family unit and the unprecedented mobility of women within the workforce has contributed to this increased demand as well. Second, market reforms throughout the region have increased economic activity. Argentina, for instance, experienced a 35% increase in real GDP and an even greater increase in foreign investment during 1990-94. This level of economic growth imposed an additional demand for court services, resulting in the inability of the judiciary to keep pace with the caseloads. Furthermore, judicial resources were not increased in order to accommodate the demand. The combination of insufficient resources and the expansion of the private sector led to this deterioration.

The competitive economic forces promoted by these reforms have in some cases appeared hand-in-hand with downsizing and layoffs within the public and private sectors. This has caused an increase, for example, in bankruptcy and wrongful termination cases. Other increases are a result of new subject matter as may be the case with competition policy and intellectual property cases which judges have been neither taught in law school nor subsequently on the job. In other cases, the subject matter simply may not even be addressed by the current legal framework. In addition, the complexity of the subjects has increased which has forced judges to spend more time on each case. Although the parties may recognize the judge's lack of knowledge on the subject matter they are given little choice to resolve disputes except to submit the case to the judiciary. Alternative dispute resolution mechanisms could be an ideal way to facilitate the need for specific expertise. Such mechanisms, however, are not frequently available. Both in Argentina and Ecuador mediation has been used with success, notably in the areas of family law. In Ecuador, non-governmental organizations' (NGOs) extra judicial mediation has resulted in a 70% success rate for certain case types.

23 Id at 45
24 We observe that this pattern of increase in court use was captured by Viancos and Correa Sutil in Chile. Refer to Vargas Viancos, Jose Enrique and Correa Sutil, Jorge (1993) Diagnostico del Sistema Judicial Chileno, Centro de estudios de Desarrollo Juridico Judicial, pp. 47-68.
Expected Times to Disposition in Argentina and Ecuador

In Ecuador and Argentina the costs (time and money) incurred by the court users has increased as a result of the current caseloads shown above. Despite a 46% increase in cases filed in Argentina during 1991-93, the number of cases disposed by these courts increased only 19%. Despite the increase in dispositions, the courts cannot keep pace with the changes in filings on a one-year lag basis.\(^{25}\) As a result, in Argentina the expected time to disposition for a civil, family and commercial case has increased to new levels of excessive time delay equal to 9.5, 12 and almost 3 years respectively. The Cappelletti-Clark indicator for expected durations has increased to unprecedented levels during the past three years.\(^{26}\) These disposition times clearly hamper access to justice. For example, median times reaching the 12-year mark inhibit women from obtaining timely alimony support and 3-year procedures prevent companies from accessing valuable resources needed to run a business.

It is important to note that after discounting for both population and economic growth, filings per court have actually been decreasing!

\(^{25}\) It has been found in other studies that the increase in new cases filed is not a major contributing factor to the backlog. However, in a Canadian study the volume of new cases increased by 15% but the backlog increased by 695% between 1989-1993. Ministry of Attorney General Provincial Court Adult Criminal Court Case Backlog Study. Prepared by Management Information and Evaluation Division Management Services Branch, June 30, 1994. at 29.

\(^{26}\) It is important to recognize that the Cappelletti-Clark index is just the ratio of ending inventory (pending cases) to withdrawn and adjudicated cases. It is not an annual input-output ratio but rather a stock-flow ratio. The inadequacy of statistics in Argentina is a still troublesome problem despite the unprecedented improvements recently implemented by the Office of Statistics of the Supreme Court. If, however, published data in a particular jurisdiction do not include direct measures of duration of litigation, it is necessary to use the Cappelletti-Clarke index as an indirect measure. This indicator has proven to approximate both the median and the mean actual duration and, thus, represents a good "measure of central tendency." However, we need to stress that this index is far from being a measure of the efficiency of the court and is not useful in assigning cases and staffing courts. The primary virtue of this indicator is its ease of computation. However, the proper allocation of judicial resources requires a more specialized statistical tool and the most promising developments in this area involve the use of standards applied to the procedural stapes followed in each jurisdiction backed by regression and correlation analyses needed to set benchmarks. see Buscaglia, E. and Ulen, T. (1995) "A Quantitative Assessment of the Judicial Sector in Latin America" Paper presented at the First Annual Meeting of the Mexican Law and Economics Association, February 2-4, 1996, Mexico City, Mexico.
Beginning in 1985 in Argentina and in 1987 in Ecuador, increases in times to disposition have caused decreases in filings per court. This demonstrates that after holding everything else constant, litigants are abandoning the court system and are either solving their disputes informally or are writing off their losses. If alternative dispute resolution (ADR) mechanisms were available to a greater extent both in and outside the courts, these parties may have opted to use an alternative mechanism to resolve disputes more quickly. At the moment, however, ADR procedures such as arbitration, mediation, or conciliation are not part of the general legal culture and lawyers, judges, as well as clients are still hesitant to fully trust the system.
The following set of graphs show how expected times to disposition for specific jurisdictions have been increasing over time. This is due in part to increased caseloads as well as the decrease in court productivity.

**GRAPH 3**

ARGENTINA's CIVIL COURTS (Patrimonia Cases)

**GRAPH 4**

ARGENTINA's CIVIL COURTS (Domestic Relations Cases)
GRAPH 5
ARGENTINA's COMMERCIAL COURTS

Expected Duration (in years)

Year

GRAPH 6
ECUADOR: CIVIL COURTS (Alimony Cases) -
PINCHINCHA DISTRICT 1990-94

Duration (in months)

Year
As seen from the graphs above, the expected duration of cases filed in Argentina have consistently increased since 1990 while in Ecuador they have decreased after 1992 within the general civil jurisdiction. The change in Ecuador can be explained by the 1992 unprecedented increase in resources allocated to the judiciary where approximately 90% of the budget was used for an increase in salaries and the number of judges.
These substantial increases improved both the salaries and morale of judges. Prior to 1992 in Ecuador extensive strikes were held by court personnel to express their frustration with the low salaries and lack of an appropriate working environment (i.e. poor supplies and political interference). The expected duration and cost of litigation decreased after 1992, and as a result there was an increase in the number of cases filed, creating even larger caseloads. This increase in filings was because more litigants were attracted to the judiciary to resolve disputes because they had an expectation that the case would be resolved more quickly. An increase in times to disposition to higher levels should once again be expected because of this additional demand, demonstrating that a one-time increase in budget resources can only alleviate matters for a short period. This would require additional research of expected times to disposition in Ecuador for the period after 1994.
Argentina and Ecuador:
Proportion of Total Cases Disposed of Within One Year

Another reason for an increase of expected times to disposition is the decline in the proportion of cases terminated within one year within the civil jurisdiction for both Argentina and Ecuador. This is also indicative of the declining court productivity and the quality of the service provided to the public. In order to understand how the courts have contributed to this development, it is important to observe and compare the behavior of the courts over time. One way to do this is to compare the percentage of cases that were disposed of in less than one year of filing within each jurisdiction, and separate the fast, average and slow courts depending on their productivity. For example, we see from Graph 10 below that the fast Argentine Labor Courts that had at one time disposed of 45% of their cases in one year in 1989 experienced a drop to 17% in 1993.

27 Courts within one standard deviation of the mean represent the average while slow and fast extend two standard deviations from the mean.

28 By contrast, in the United States the percentage of divorce cases disposed within one year varies from 74-99%. Divorce Courts, supra note 13 at 5.
The same decline can be seen in Ecuadoran courts. By using the Capelletti Index, one can see that civil and labor courts have been providing lower quality service since 1989. The proportion of civil and labor cases terminated in one year has decreased from 47% and 35% in 1989 to 20% and 17% respectively in 1995, as shown in Graph 12. Although this is not a decrease equal to the one in Argentina, it is significant enough to cause expected times to disposition to increase. The Argentine experience may be due to the fact that some of the Labor Courts were moved out of buildings which were in fear of collapse into small quarters with not even basic court necessities. This surely had an effect on court productivity.
GRAPH 11

ECUADOR

PERCENTAGE OF CIVIL AND LABOR CASES TERMINATED IN ONE YEAR

[Graph showing the percentage of civil and labor cases terminated in one year from 1989 to 1995.]
PART III
Factors Associated with the Procedural Times in Argentina and Ecuador

Scope and Methodology

Part III discusses the main factors that significantly affect times to disposition in cases filed between 1989-93 in Argentina and Ecuador. The scope of our report does not, of course, cover the entire judicial system in each country; rather if focuses on a sample of Argentina's National Courts of First Instance in Buenos Aires and Ecuador's First Instance Courts in Quito where the main concentration of backlogs and longest times to disposition are currently observed. The analysis is based on cases within these courts which represent the three most common casetypes filed per jurisdiction. A broad spectrum of factors was included to determine which are associated to the times to disposition observed in the sample. This included supply (court)-related and demand (user)-related factors affecting judges, court personnel, lawyers, and litigants. In addition, court resources and the case and court management styles applied by judges and clerks were also included as factors. The procedural times at each relevant step were then measured within the life of a case and linked to the above factors.

The performance of courts dealing with the same types of cases and receiving approximately the same work load was analyzed in order to pinpoint some of the main structural differences related to times to disposition. The analysis also takes into account the judge's assessment of the complexity of the case involved and the litigants' willingness to pay for court services. For example, costs paid by the users of the court can be direct (court and attorneys' fees, etc.) or indirect (transportation costs, bribes, production losses,

29 Refer to Statistical Reports for 1991, 1992, and 1993, "Cantidad de Expedientes Tramitados en los Fueros de la Capital Federal y Jurisdicciones Federales del Interior." Supreme Court of Argentina. The Argentine civil casetypes are as follows: breach of contract, alimony and traffic accidents where death or injury occurs; in the commercial area: bankruptcy, debt collection, and breach of contract; labor includes: wrongful termination, backpay. The Ecuadorian civil casetypes include: bankruptcy, debt collection and alimony; Labor: wrongful termination, workmen's compensation, backpay; Traffic: car accidents when deaths or injuries occur; Landlord/Tenant: variety of cases of which the majority were eviction cases. Domestic relation cases represent one third of the cases filed in the courts in Ecuador and Argentina and therefore has a significant social impact. The same is true in the state trial courts in the United States where one third of all civil cases are domestic relations and tort, contracts and property cases together make up another one third of the civil cases filed. Divorce Courts, supra note 13 at 3.
financial costs, or loss of workers' time). In a sample of 120 cases per country these costs were measured in each case. These two cost-types are used as factors to be related to the times to disposition. These factors, listed below in Chart 3, are statistically linked to the procedural times observed in the sample of 120 cases in each country by using the Spearman correlation non-parametric method.\(^{30}\) The court-related factors not significantly associated with the actual times in 120 civil cases are shown with an X in Chart 3.\(^{31}\)

\(^{30}\) This method is explained in the Annex

\(^{31}\) The cells marked with an X show the factors that are associated significantly at a 5% level with procedural times in each jurisdiction examined. The actual Spearman coefficients are shown in the Annex.
Whether in Argentina or Ecuador, the most important factors that were observed relate to the number of case filings, case management, resources allocated for court personnel, and complexity of the case. As a result, these factors should be carefully considered by the courts when addressing policies to reduce times to disposition, and should be included in judicial reform programs. It is important to note, on the other hand, that an increase in budget resources was not proven to be a significant factor except for the civil court in Quito, Ecuador (as discussed in Part II). This result supports the international experience where there is no proven significant correlation between the efficiency of the judiciary (measured through backlogs and delays) and the size of the government budget allocated to the courts. Graph 12 below demonstrates this lack of correlation within Latin America. The average percentage changes in the median times to disposition within the commercial and civil jurisdictions and the percentage change in spending in personnel (after discounting for economic and population growth) are measured in the vertical and horizontal axes respectively. After discounting other factors, one observes that there is a lack of association between real spending and median times. Thence, countries with the

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* This factor was only included in the Argentina study. It includes all direct costs, including court fees, lawyer and expert witnesses.

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32 In comparison, the number of filings per court in the U.S. is not found to be related to the pace of litigation. In fact, some courts with the highest caseloads per judge were among the fastest. However, the backlog index which is the number of cases filed at the beginning of the year divided by the dispositions does affect the pace of litigation. Barry Mahoney, Larry Sipes and Jeanne A. Ito, Implementing Delay Reduction and Delay Prevention Programs in Urban Trial Courts, A Report prepared for the National Conference on Court Delay Reduction, Denver, Colorado, September 5-7, 1985 National Center for State Courts at 12, 18.

33 Buscaglia and Dakolias, supra note 9 at 20.
largest changes in spending are not usually those with the quickest times to disposition. Brazil and Chile are examples of this lack of correlation. Brazil, which allocated the most resources to personnel does not have the quickest time to dispositions, while Uruguay, which allocates the least resources, does not experience the longest times to disposition.
As discussed in Part II, this lack of correlation may be explained by the fact that additional resources (personnel and capital), which represent a semi-fixed cost to society, may only reduce backlogs and delay due to improvements in court productivity in the short run, but not for the long term. Instead, other factors associated with times to disposition must also accompany the increase in resources to improve the long term times to disposition. Economic growth may have, however, in all Latin American countries added pressure on the courts through an increase in demand created by economic activity. An increase in the number of firms also may have increased demand and may have neutralized
the effects of the increase in judicial resources. The joint effect of both forces makes it
difficult to determine the consequences of adding or subtracting resources devoted to the
judiciary.

In contrast, the number of court personnel does have a significant impact on
delays.\textsuperscript{34} This is especially true in alimony cases in Argentina. In these cases, the number
of court employees is significantly associated with the preparation and sentencing stages of the
case process. This result is consistent with the normal processing of cases since the
preparation and sentencing stages require more judicial responsibility than other stages of the
process. These findings differ somewhat from those in the U.S. where the number of judges and court personnel have not been found to be related to the pace of litigation.\textsuperscript{35}

The impact of the number of court personnel on times to disposition is important in
the assessment of when the size of the staff in each court is sufficient for efficient case
processing. In order to deal with the increasing backlog, for example, additional personnel
were added to the Supreme Court in Singapore\textsuperscript{36}. Many courts cite this as a priority in
delay reduction.\textsuperscript{37} Based on case weighing\textsuperscript{38} the number of judges needed to dispose of all
filed cases per year given the current court-productivity and number of staff-hours available
can be determined. The analysis of the Argentine courts indicates that the commercial
jurisdiction is in need of additional judges and court personnel. Specifically, four more
judges are needed within the National District's Commercial Jurisdiction in Buenos Aires.
It is also estimated that the Civil National Jurisdiction experienced a 13-judge shortage in
1992 and a 6-judge shortage in 1993. Yet the labor courts have increased the number of

\textsuperscript{34} Yet, we found that increasing the court-personnel salaries across the board does not necessarily decrease the time to
disposition.

\textsuperscript{35} Implementing Delay Reduction, supra note 32 at 12.

\textsuperscript{36} The Supreme Court doubled its judicial appointments. At the same time, however it reduced the number of judges from
three to two that would hear civil appeals. Supreme Court Singapore, supra note 9 at 56.

\textsuperscript{37} Both in Latin America and in the United States, Divorce Courts, supra note 13 at 6.

\textsuperscript{38} The need to add judicial resources requires a case-weighting system. In general, case weighting systems are based on
the notion that different kinds of cases require different amounts of judicial time. For each jurisdiction in this study, we
associated the real spending in personnel and the times to disposition observed by combining the survey data on case-
related judge work-time per case, the length of the judges' workday and work year, and case filings for various types of
cases. In the civil jurisdiction, we multiplied the median case-related judge work hours per case times the number of case
filings for various types of cases to yield an estimate of the total workload generated by new case filings each year. We
then divided that total by the average number of case-related work-hours per judge in a year to estimate the
number of judicial officers needed.

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personnel at an appropriate pace with neither significant shortages nor surpluses in human resources. The Argentine National Courts are therefore not completely underfunded with respect to size of their staff and should be able to handle the current caseloads in the courts.

Capital and other investment spending, however, have not kept pace with the demand for court services. This is reflected in severe shortages of physical infrastructure, modern computer equipment, and adequate growth in human capital through training programs and the development of management skills, which has inevitably hindered the efficient case processing by the courts. In addition, Chart 3 shows computer technology is also significant to times to disposition, and this is especially true at the preparation, discovery and sentencing stages. Information technology assists in decreasing procedural times. In Ecuador, there is an almost perfect association between the use of computers and the decrease in times experienced during the sentencing stage in civil cases.

Uniform and consistent case management can also decrease times to disposition, especially when coupled with judicial activism. Case management occurs when judges utilize techniques aimed at accelerating the case flow by, for example, allowing simple cases to be heard first regardless of when they are filed. Additionally, judges who take an active role in the preparation stage (e.g. seek solutions during meetings with parties) have a significant comparative advantage in decreasing the time needed by them for each case, because such conferences can increase the settlement rate. Court control over scheduling of case events can also be an important component in delay reduction. An active case management can decrease the number of motions and the time litigants and their lawyers take to file them, especially if the judge can impose a sanction for filing frivolous

39 Buscaglia and Dakolias, supra note 9 at 45-46.

40 The same was found in the Ontario Pilot Projects. Caseflow Management: An Assessment of the Ontario Pilot Projects in the Ontario Court of Justice. A Draft Report to the Court Administration Division Ministry of the Attorney General Ontario November 1993 at Appendix I

41 By Comparison, in Singapore, there is a 90% settlement rate at these conference which were instituted in 1994. The Judiciary-Annual Report 1995 Singapore, Supreme Court of Singapore, supra note 9 at 49. For pre-trial conference, the settlement rate was 34% in 1994. Supreme Court Singapore Reorganization at 45. In the United States 72% of all civil cases are settled or dismissed. Ostrom and Kauder, 1994 supra note 9 at 27.

42 Divorce Court, supra note 13 at 80. Faster courts have been found to set trial dates at their own initiative. So the courts must move the process not the parties. Id at 22.
On the other hand, an active role may simply mean judges who enforce existing procedures. In alimony cases in Argentina, judges increasingly enforce deadlines during the preparation and discovery stages. These findings are consistent with the results found in the United States where case management, especially at the early stage, has an affect on the time to dispositions. Specifically, the faster courts in the United States have been found to use case processing time goals. Similar results have been found in Canada, where the courts accept responsibility for the pace of litigation once the case is filed.

Chart 3 shows that the complexity of a case can also have a significant impact on times, especially during the sentencing stage where judges play a more active role since this is a responsibility which cannot be delegated to a clerk. Complexity may be caused by the burdens of court supervision, the existence of expert witnesses, or the filing of interlocutory appeals. Complexity, whether a result of a lack of appropriate judicial training or of natural substantive complexity of a case type (e.g. cases involving biotech intellectual property), has an effect on procedural times.

Although complexity can create delays, lawyers can benefit from the resulting increase in time to disposition. Lawyers' fees in both Argentina and Ecuador are

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43 In Ontario, the number of motions filed in general civil matters has increased 100% and 150% in family matters over the past five years. As a result, the time devoted by the courts for motions and pre-trials has increased 69%. Civil Justice Review, supra note 6 at 239, 71, 63.

44 Implementing Delay Reduction 1985 supra note at 17. For example, a Detroit state court reduced its median time to disposition by 48% by implementing a new civil case management. This program was implemented in 1987 and resulted in a 48% decrease in time to disposition by 1990. Divorce Courts, supra note 13 at 73.

45 This is true for general civil case processing. Divorce Courts, supra note 13 at 21.

46 In pilot courts established in Toronto, case managed cases are disposed of at two times the rate than non-case managed cases. 70% of the case managed cases are disposed of within 12 months while only 20% of the non-case managed case are disposed of in 12 months. Civil Justice Review, supra note 6 at 173.

47 Id at 17. This is especially true where the individual calendar system is used for civil cases as opposed to the master calendar system. Id at 15.

48 In the United States, complexity is a key factor except in criminal cases. Implementing Delay Reduction, supra note 32 at 14.

49 The degree of specialization in judicial responsibilities does have a relationship with the median case processing time. For example, judges who specialize in contested divorce trials tend to have faster median times. Divorce Courts, supra note 13 at 13. It has also been said that junior court personnel contribute to a slower case process. Adult Criminal Backlog Study, supra note 25 at 27.
determined, among other factors, by the court's assessment of the complexity in a case. Thus, lawyers justify their fees on the basis of the complexity in a case. As a result, there is a perverse incentive for lawyers to artificially increase the complexity by adding layers of motions and procedures to justify higher fees. This is especially true when lawyers are paid by the court. In Canada it has been found that legal aid cases take longer to complete than non legal aid cases because lawyers paid by legal aid make more appearances in court thereby contributing to the longer times to disposition.\textsuperscript{50} A recent national law in Argentina was passed which creates a maximum lawyer-fee equal to 25\% of the final award-judgment. This 25\% also includes, however, all court fees as well as expenses related to expert witness. This law prevents lawyers from including work from filing additional motions to their fees. As expected, this law has caused a decrease in the real cost of litigation as a percentage of initial demands.\textsuperscript{51} This may have contributed to the incentive to litigate and may explain in part why filings have increased at such unprecedented speed in Argentina.\textsuperscript{52}

Chart 3 also establishes that attorney experience is associated with increases in the times to disposition found in civil cases in Argentina and Ecuador. As stated above, attorneys have incentive to file frivolous motions in order to add to the complexity of the case. Less experienced attorneys are less knowledgeable in the practice of delaying the process and are therefore less able to add artificial complexity. As a result, delaying cases is part of the legal culture because attorneys perceive that a higher probability of winning a case will occur if the case is delayed.\textsuperscript{53} The incentives must change if there are to be decreases in times to disposition. One important way to do this is for judges to actively enforce legal deadlines and sanction lawyers when necessary.

\textsuperscript{50} The legal aid system in Canada does not reward attorneys for completing cases quickly. For example, in property offenses, the median number of days to complete the case for a non legal aid case was 30 days while a legal aid case took 119 days. \textit{Adult Criminal Backlog Study, supra} note 25 at 17,21.

\textsuperscript{51} The direct costs have decreased from 35 percent in 1989 to 23 percent in 1993.

\textsuperscript{52} We need to remember that since 1989 inflation has decreased tremendously in Argentina, from more than 2000 percent a year to less than 10 percent in 1993. Inflation may have a powerful effect on the incentive to litigate. This has not been explored in the literature. Our conclusions here, however, are based on 1993 constant prices.

\textsuperscript{53} \textit{Adult Criminal Backlog Study, supra} note 25 at 3.
Alternative dispute resolution mechanisms (ADR) (i.e. mediation, arbitration and meetings with lawyers, parties and/or judges -- court sponsored or extra judicial ADR, and informal mechanisms used by parties to settle cases), as seen in Chart 3, is also a significant factor associated with reductions in the times to disposition observed in labor, alimony and civil cases in Argentina. This is true as long as the ADR mechanisms do not permit the parties to later revisit the case in court thereby adding one more layer to the case, perhaps increasing the times to disposition. Mediation, for example, is being used successfully in pilot projects in Argentina where approximately 65% of the cases are being resolved. This success rate helps to alleviate the backlog in the courts and times to disposition.

The population per filing also has an effect on time. The larger the population, the more time a case will take to be disposed of. This requires, however, a further in-depth review on how the number of court personnel as well as other factors affect the number of cases filed.

In Chart 3, the plaintiff's income has a powerful effect on the times to disposition observed in alimony cases. More specifically, the higher the level of plaintiff's income the quicker the case is disposed. This is especially true during the motion stage which may be due to the fact that plaintiffs who cannot afford a higher paid attorney cannot avoid delay tactics used by defendants during the discovery stage. As a result, women as plaintiffs in alimony claims, who in general have more limited property rights over family income and wealth, tend to suffer greater delays.

54 However, one study shows that whether mediation is mandatory or voluntary does not affect the time to disposition. Divorce Courts, supra note 13 at 26.

55 By contrast in the United States, arbitration is used in only 3.5% of all tort cases that are disposed. Ostrom and Kauder (1996), supra note 9 at 27.
PART IV

A Quality Control Approach to Improve Court Performance

In order to determine whether the courts are functioning as expected and within pre-established guidelines, standards must be developed. These standards are not based on the actual procedural times required by law but rather on the "best court" scenario. In this way, the courts can determine whether they are providing the public with an efficient service by comparing the actual times to disposition with the "best court" scenario.

Part IV identifies a range of time within which specific casetypes need to fall in order to be considered "under control." Under this approach, a case will be considered delayed if its time to disposition falls outside this range, that is outside the "best court" scenario. Part IV therefore advances a working definition of court delay. The limits to this range will be determined by a simulation where a hypothetical "best court" will be derived based on the factors included in Part III. The framework here provided will then allow court authorities to pinpoint "abnormal" cases as well as courts, and later propose solutions based on the factor analysis advanced in Part III above.

An understanding of the types and sources of variations in the times to disposition is critical to a quality control analysis. It is important to differentiate the observed variability in the times to disposition that are due to random or normal procedural causes from those variations that are due to special causes not related to the court procedure itself. Such

56 Consider each value of procedural time as our random variable $x_t$ where $t$ is a time index, in our case $t$ varies from 1981-1993. Two control charts will be constructed to determine where $x_t e$ is in control. We will assume three scenarios. First, when the value of the theoretical time delays $\mu$ is unknown, then $x$-bar will be estimated through the median procedural times.

57 The reduction in the variation of any process is beneficial. You can never, however, eliminate all variation, even in the simplest process, since there are bound to be many small, unobservable, chance effects that will influence the outcome. Variation of this kind is called controlled variation. Under a controlled variation scenario, many individually insignificant random factors interact to have some net effect on the process output, that in this case refers to the time to disposition. Random variation in the times to disposition is said to be "in control" not because the judge or court officers are able to control the factors absolutely, but rather because the variation is the result of normal or expected disturbances, also called common causes within the procedure. In this case, the variation can be predicted. In other words, given the procedural steps, each of these common causes is being controlled to the maximum extent possible.

The other type of variation that can occur within a process is called uncontrolled variation. Uncontrolled variation is due to special systematic causes, which arise sporadically and for reasons outside the normally functioning
analysis falls under the category of a statistical process or quality control. The principal tool of statistical procedural time control is the control chart.

**Conceptual Framework for Quality Control Analysis of the Courts**

The quality of a service process differs from the quality of a manufacturing process in two important aspects. The first is that the measure of quality is, under most circumstances, a subjective assessment. The second aspect is that in court delays, the standard by which the quality of the service provided by a court is assessed is often ambiguous or incomplete. The determination of the elements that effect quality are generally thought to be the building blocks of a process. A process is any set of people, equipment, procedures, and conditions that work together to produce a result. The procedural steps followed by a court fits this definition.

The results of a process vary over time. Each succeeding "result" will be slightly different due to variations in, for example, the difficulty of a particular case and the physical and mental actions of the people who are part of the case. If these variations are minor, they are irrelevant. Almost all processes result in time variations; that is, no two legal cases are exactly the same. In quality control there are two well-defined sources of variation. Chance variation is caused by a number of randomly occurring events that are part of the process under study and that cannot in general be eliminated without changing the process. In this case, many individually insignificant random factors interact to have some net effect on the process output, in this case, a net effect on the time spent in each procedural step. Random variation in the times to disposition is said to be "in control" not because the judge or court is able to control the factors affecting the times to disposition absolutely, but rather because the variation is the result of normal disturbances, called common causes, within the procedure. In this case, the variation is predictable. In other

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Feigenbaum A.V., Total Quality Control-Engineering and Management, 8th ed. New York, MacGraw-Hill
words, given the procedural steps, each of these common causes is being controlled to the extent possible.

The other type of variation that can occur within a process is called assignable variation, which is caused by specific events or factors that are frequently temporary, and that can usually be identified and eliminated. This uncontrolled variation is due to special causes, which arise sporadically and for reasons outside the normally functioning procedure. Inter and intra-court variations in the observed procedural times induced by a special cause are usually significant in magnitude and occur only occasionally. Examples of special causes include well-defined differences in management style, the bypass of procedural rules or steps, difference in the court secretary's skills, and the number of court officers working on a case. Information about all these special causes is included in the factor analysis in Part III.

Perhaps the best way to understand the nature of the variations in the observed procedural times is by considering each measurement as a random variable. If the only sources of variation are caused by chance, then each measurement can be said to be drawn from identical distributions. That is, each distribution has the same shape, mean, and variance. When such situations occur, we say that the process is under control. In order to determine whether our system is in control we resort to the techniques of statistical quality control. Statistical Quality Control is a philosophy, a system, and a set of specific techniques for controlling and improving service processes which can determine whether apparent problems in a system are due to merely chance variation or a presence of an assignable cause. Control charts often help to diagnose, control, and improve a process.

A control chart is a graph representing the performance of a process over time, in which the behavior of the process is carefully observed. It is defined by a center line that determines the expected behavior of a process and two additional limits called the upper and lower control limits, UCL and LCL respectively. When the process performs outside the control limits something unusual has almost certainly occurred. Another important advantage of a control chart is the fact that it takes into account temporary patterns. Namely, if a group of consecutive cases are above the expected value of case duration (i.e. expected time to disposition), it may indicate that there was a change in the judge's approach to case disposition.
The $m$ value represents the median or expected observation, i.e. the median procedural total time $t_i$ for case $i$. When procedural times, or their transformation, are approximately bell shaped, with standard deviation $s$, we should expect that 99.98% of the data will be comprised of a set at three standard deviations from the centerline. We can then define the control limits as follows:

Upper control limit (UCL) = $m + 3s$
Lower control limit (LCL) = $m - 3s$

Here, the standard deviation value indicates the average variability of court delays. As the control limits depend on $m$ and $s$, we conclude that the process distribution changes if the location and/or the dispersion changes. In order to determine if the location for $m$ has been altered, we create the Control or X-chart. To learn whether the dispersion $s$ has changed, we employ the Range (R) chart, which plots sample ranges. The range is defined as the largest minus the smallest observation in a set of data.

After having constructed the control chart by drawing the centerline and the control limits, we use it to plot our calculations of sample procedural times. The principles underlying control charts are identical to the principles of hypothesis testing. With control charts, the null and alternative hypothesis are:

HO: The process is under control.
HA: The process is out of control.

We now develop time standards for selected jurisdictions that are not dependent on past observed averages. These standards show that more than 55 percent of the cases sampled take more time than what is expected under normal circumstances. The time standards developed in this study can be used as possible guidelines in the development of judicial reform strategies. They provide benchmarks by which to measure the effects of reform efforts.
Proposed Time Standards for Selected Jurisdictions

By applying the quality control analysis as described above, time standards (i.e. benchmarks) have been derived for selected jurisdictions in both Argentina and Ecuador. These time standards determine whether a case is delayed. The standards assume that all the cases undergo all the steps required under the Procedural Codes. These standards determine a minimum and maximum time within which a case is expected to be disposed of.

Although long times to disposition are the major concern, a quick disposition, falling below the minimum time, may also show symptoms of a dysfunctional court especially if court officers do not devote enough time to the consideration of a case. Denial of justice may occur when cases are disposed without sufficient consideration by judges, and therefore the minimum times to disposition can also be used to monitor the predictability of the decision-making.

The minimum and maximum ranges included in Annex II define an acceptable performance standard addressing the efficiency of the courts. These standards can serve as an important guide by which to measure the success of any pilot program which address the significant factors affecting times to disposition discussed in Part III. Therefore, the time standards would be continuously updated and revised to incorporate the improved performance observed within the courts.

Based on the above methodology, the following time standards have been defined. In Argentina, the time standards are defined as follows: 1.4 to 5.4 months in alimony cases, 14.4 to 26.4 months in tort cases, 9.9 to 20.3 months in eviction cases, 15.9 to 30.1 months for bankruptcy cases. In the jurisdictions sampled, a significant proportion of the cases fall outside the time standards and therefore would be considered delayed (see Annex II).

For example, 14 of the 40 alimony cases sampled are outside the time standards (see Annex II, Graph 1). Given the urgent nature commonly found in alimony cases, an efficient disposition by the court must be reached. Moreover, 94 percent of the sampled tort cases fall outside the standards. In eviction cases 56 percent fall outside the standards. Only five of the 40 bankruptcy cases sampled are within the standards.
In Ecuador, the time range defining standards are the following: 1.2 to 4.8 months in eviction cases, 1.5 to 6 months for breach of contract cases, 7 to 14 months for transit cases, and 5 to 11 months for labor cases. Here again, in all of the jurisdictions sampled, a significant proportion of the cases fall outside the time standards and therefore would be considered delayed. For example, 9 eviction cases out of a sample of 25 comply with these standards. In contract cases, 11 out of 35 cases are within the defined standards. Only 13 out of 25 labor cases are within the standards. In transit cases, 28 out of the sample of 57 cases fall within the standards. Since a significant number of cases are outside the time range defined as standard, courts should be encouraged to address the performance-related factors discussed in Part III which affect times to disposition.

It is important to understand why many of the cases do not fall within the established benchmarks above (i.e. standards) and which reforms could be implemented to bring the remaining cases within these benchmarks. One explanation is that the procedural times and standards established by law are either ignored or violated repeatedly by the parties as well as the judges. In ordinary commercial cases, the median procedural times all exceed the mandated deadlines established in the procedural codes for all stages. These mandated deadlines are normally considered by judges to be "unrealistic." As a result, the mandated deadlines established in the procedural codes have become irrelevant. The benchmarks defined in this paper, therefore, can be used as a way to determine what time standards are realistic and can serve as a basis to discuss possible revisions in the deadlines set in the procedural codes. More research is needed to analyze the code-mandated deadlines vis-a-vis the quality control times proposed in this paper.

In addition, the unjustified complexity and lack of systematization in the management of a typical case could also explain this violation of the deadlines mandated by

59 Civil cases are analyzed in accordance to the executive, ordinary, and summary procedures. The time structure of the ordinary procedure is based on a wide knowledge of the controversy that is presented before the judge during the preparation stage. A period devoted to discussing and agreeing on the issue follows. It is here that the litigants argue about their rights and clarify the issues through written motions. This discussion stage also determines the area on which the proof needs to be built upon. If after the discussion process the court determines that a substantive controversy exists, then proof related to the issues previously discussed will be requested. Examining the proof presented before the judge follows during the discovery process. Diverse motions are presented, which usually lengthens the times to disposition. The relative frequencies of these motions are: exceptions (21%); allocation of legal fees (28%); incapacity to pay based on low income level (9%); interlocutory appeals (34%); and others (8%). Finally, the first and second instance sentence constitute the fourth and fifth steps in our procedural analysis.

the procedural codes. In Argentina, for example, when an average complaint is brought to court, it takes 24 to 48 hours for the complaint to be filed and recognized by court officers. It usually takes between 2 to 3 days for a file to reach the clerks' chambers, and when it does, it is often returned due to a simple oversight of a bureaucratic requirement. The process then begins again, and finally, the case often reaches the judge after one month. The extreme time spent by judges on administrative tasks and the incentives by lawyers to prolong the case also contribute to the courts' inability to keep within the mandated deadlines.

In order to decrease the time delay, however, the courts should experiment with changes in those factors that have a significant correlation with procedural times as described in Part III, the most important being case management, resources allocated for court personnel and computer technology. Together these elements can assist the courts in combating delays. Technology will not only allow courts to improve their efficiency but will also aid in tracking their progress in maintaining the times to dispositions within the defined benchmarks.
CONCLUSION

This paper shows that times to disposition have been increasing at an unprecedented rate since 1988 both in Ecuador and Argentina. Factor analysis suggests the need for judges to take an active management of cases (e.g. enforce procedural deadlines, use of case selection criteria, promotion of settlement meetings, etc.).\(^{61}\) Together with these changes, it would be important for courts to set case processing time goals and develop a mechanism to monitor progress.\(^{62}\) This would require emphasis on statistics. Additionally, the judiciary needs to forecast the demand for court services in order to avoid increases in time to disposition due to unpredictable demand pressures. Given the strong link between times to disposition and the factors associated with these times, productivity can be accomplished not just through the creation of additional courts but also through improvements in case management techniques, and a uniform, less time consuming administrative approach.

The factor analysis of Chart 3 aims at identifying the main areas which will obtain the most effective results in a cost effective way without imposing added demands on the national budget. The quantitative study shows that diminishing the incentives by lawyers to increase the complexity of a case diminishes the time to disposition across the board. At the same time, merely adding random budgetary allocation may not have an impact on court efficiency. It has been shown in other countries that the cost of filing of a case managed case is lower than a non case managed case,\(^{63}\) since they are expected to be resolved more quickly.

Finally, ADR mechanisms are significantly associated with the reduction in times to disposition. Arbitration mechanisms are, however, also capable of adding one more layer to the process of formal conflict resolution if the final decision of the arbitration is not binding. However, binding ADR mechanisms may help alleviate some backlog if combined

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\(^{61}\) In Ontario, Canada the first step was to find out the status of the pending cases since many may have been closed. This reduced the backlog of cases by 90%—this is known as purging. Civil Justice Review, supra note 6 at 158.

\(^{62}\) For example, in Ontario Canada, the time goals proposed were that from filing to settlement conference would range from nine to twelve months, and from the settlement conference to trial would also be nine to twelve months. Civil Justice Review, supra note 6 at 25.

\(^{63}\) Ontario Pilot Projects, supra note 40 at 18. However, the cost to administer the case managed cases is higher, but they tend to settle earlier. Id.
Delay reduction programs are needed on a broad scale to address the factors discussed above. As found in other studies it would be important for the success of the program that the delay reduction procedures be publicized with the bar association, that there is strict continuance policy, that judicial personnel call lawyers to remind them of deadlines, that hired judges be used when necessary, and that the court is prepared to dismiss cases or impose sanctions that result in delay. Such a program cannot be implemented without a specific program manager.

Part IV developed a quality control approach to determine the benchmarks within which cases must fall in order to meet the standards. This provides the first working definition of "delay" and also monitors court performance after the introduction of reforms based on the factor analysis in Part III. In this context, 87 percent of all cases sampled are currently out of control. This means that the variations in these times can be reduced by addressing specific causes such as passive management style or lack of technology. In both Argentina and Ecuador, the reforms have been for the most part cosmetic and have not dealt with underlying factors causing delay. Although individual courts and judges may have experimented with different management styles and techniques, they have never been applied in a uniform manner at a national level. If the judiciary as a whole is to increase its efficiency, the issue of delay must be addressed across the board. It should be remembered, however, that efficiency cannot be improved at the expense of effectiveness.

Throughout Latin America, the structural reforms adopted in this century altered the number and organization of the courts, their jurisdiction, functions, rule-making, and budgetary authority that shaped the courts of today. Lately, these courts have turned their attention to procedural reforms. The criminal courts in Argentina introduced new oral

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64 In the United States it has been found that ADR must accompany other delay reduction measures in order to be effective to reduce delays. Implementing Delay Reduction, supra note 32 at 19.

65 Implement Delay Reduction supra note 32 at 26 and 33.

66 One of the important recommendations that came out of the Ontario Pilot Project. Ontario Pilot Projects supra note 40 at Appendix I.

67 For example, in Singapore payments for hearings have been imposed in order to provide incentives for the parties to finish a trial within one day. The first day is free for a trial in the Supreme Court and in the Court of Appeals, but day 2-5 is US$1,500, day 6-10 US$2,000 and day 11 and beyond is US$3,000. In 1992 80% of the cases took one day or less for trial. Cases that took longer than one day were commercial cases which involved corporate and individual litigants with financial means. This approach limits access severely based on income. Singapore Re-organization supra note 9 at 66-67. However, expanding access can also contribute to longer times to disposition. One study concluded that the use of more interpreters does slow the pace of litigation. Adult Criminal Court Backlog, supra note 25 at 26.
procedures as a result of rising delay concerns and rising costs in 1992. Additionally, a record number of new judges have been appointed in order to handle oral procedures in criminal courts. In December 1992 the Ecuadorian judicial system experienced a major structural change. Constitutional and statutory changes included doubling the size of the Supreme Court, creating a Judicial Council, redefining the jurisdictional role of the Supreme Court, creating a new mechanism for the selection of judges, and increasing the judicial budget as well as salaries. These changes reflect the first steps to address some of the systemic problems which have plagued the judiciary for years, and were aimed at creating a more accountable administrative structure. In this way, the Ecuadorian reforms of 1992 mirrored similar efforts in Chile, Colombia, Costa Rica, Peru, and Venezuela.

In February 1995, additional reforms to the constitution were approved by Congress. These reforms were designed to depoliticize the judiciary and strengthen the mechanisms through which civil liberties and legal rights are enforced. A recent statute also established that 2.5% of the current net income of the central government's budget (for the years 1994-96) be available to the judiciary. This is a solid first step, yet many of the factors analyzed above must also be addressed. Factors such as artificial complexity, passive management style, and lack of case tracking technology are all hampering the quality of the court service provided in Argentina and Ecuador.

The continuously deteriorating state of the judiciary effects both private and public sectors as well as the public at large. An accessible and efficient judicial sector is necessary to handle more complex transactions, i.e. takeovers and mergers, which have arisen as a result of market reforms. The judiciary can impact market transactions by ensuring predictable dispute resolution costs and effective enforcement of property and contractual rules. In this context, the judiciary has a major role to play in assuring the growth of markets. Governments are therefore forced to address this crisis in the judicial system in order to create a reliable environment for foreign investment and for the enforcement of individual rights.

68 Dakolias, Ecuador: Judicial Sector Review, supra note 21 at 14.

69 Id.

70 However, computation of this 2.5% has become a source of controversy within the Ministry of Finance which intends to charge the judiciary with an allocation of the total foreign debt. If the funds are measured in this manner, there will be less funds than before the constitutional reform. Id.

ANNEX 1

SPEARMAN CORRELATIONS

Interpretation of the Results

One can understand the strength of the relationship between the supply and demand side variables on the one hand, and the average procedural times experienced at each of the stages shown below, by applying a non-parametric correlation analysis. It is interesting to determine whether a correlation exists between each of the factors chosen above and each procedural step. The correlation indicator used here is based on the rank-based nonparametric Spearman index. A correlation coefficient is always between -1 and 1. A correlation of +1 means that all of the data correlate perfectly within a positive relationship or association. A positive association means that two or more variables move in the same direction. That is, a court with a longer time during the preparation stage is likely to be followed by a longer discussion stage. A correlation of -1 means that the data points all have a perfectly negative relationship. However, if the correlation is close to 0, then there is no relationship between two stages. In our case, each correlation can be significant or insignificant at a 5 percent level. If a correlation is accompanied by the symbol "(i)" then this would mean that there is more than a 5 percent chance of a zero correlation for the population. In Argentina’s labor courts, for example, the use of computer systems is negatively associated with the total time to disposition found in the sampled cases (i.e. -0.35). In the commercial courts, this negative association is even stronger. That is, an increase in the use of computer systems will reduce the times to disposition in a significant manner (i.e. -0.78).
ARGENTINA

LABOR COURTS

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<th>TOTAL TIME</th>
<th>PREPARATION</th>
<th>DISCUSSION</th>
<th>MOTIONS</th>
<th>DISCOVERY</th>
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COMMERCIAL COURTS

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<td>-0.06 (i)</td>
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44
### Demand Variables

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### PROCEDURAL ANALYSIS OF CASE TYPES BY JURISDICTION

#### CIVIL COURTS

##### Ordinary Cases

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<th>DISCOVERY</th>
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<td>-0.08 (i)</td>
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##### Labor Cases

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COMMERCIAL COURTS

Family Cases

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ANNEX II

The graphs below show time ranges defining standards to be followed by courts in each of the jurisdictions considered.

GRAPH 1

ARGENTINA:

PROCEDURAL TIME STANDARDS FOR ALIMONY CASES
GRAPH 2

PROCEDURAL TIME STANDARDS IN TORT CASES

TOTAL TIME (IN MONTHS)

CARES
GRAPH 3

PROCEDURAL STANDARDS IN EVICTION CASES

TOTAL TIME (IN MONTHS)

CASES
GRAPH 4

PROCEDURAL STANDARDS IN BANKRUPTCY CASES

TOTAL TIME (IN MONTHS)

CASES
GRAPH 5

ECUADOR

TIME BENCHMARKS FOR BREACH OF CONTRACT CASES, IN CIVIL JURISDICTIONS
TIME DELAY BENCHMARKS: LABOR JURISDICTIONS
No. 302 Baldry, Calamari, and Yaméogo, Environmental Impact Assessment of Settlement and Development in the Upper Léraba Basin

No. 303 Heneveld and Craig, Schools Count: World Bank Project Designs and the Quality of Primary Education in Sub-Saharan Africa

No. 304 Foley, Photovoltaic Applications in Rural Areas of the Developing World

No. 305 Johnson, Education and Training of Accountants in Sub-Saharan Anglophone Africa

No. 306 Muir and Saba, Improving State Enterprise Performance: The Role of Internal and External Incentives

No. 307 Narayan, Toward Participatory Research

No. 308 Adamson and others, Energy Use, Air Pollution, and Environmental Policy in Krakow: Can Economic Incentives Really Help?


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No. 311 Webster, Riopelle and Chidzero, World Bank Lending for Small Enterprises 1989-1993

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No. 329 Mohan, editor, Bibliography of Publications: Technical Department, Africa Region, July 1987 to April 1996

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