DRAFT DATED 12th JULY 2019 please do not cite

STATISTICS PACK 2018

SUPREME COURT OBSERVER JULY 2019





I.	INTRODUCTION	
II.	INSTITUTION	7
	 A. 1950-2018 B. 2009-2018 C. 2018 D. TYPES OF INSTITUTION E. PUBLIC INTEREST LITIG. 	9 11 14 15 ATIONS 16
III.	DISPOSAL	21
	A. 1950-2018 B. 2009-2018 C. 2018 D. TYPES OF DISPOSAL E. JUDGMENTS IN 2018 i. AVERAGE LENGTH ii. AUTHORSHIP iii. AGE	22 26 28 29 34 34 37 38
	F. INSTITUTIONAL CAPAC	ITY 41
IV.	PENDENCY	45
	 A. 1950-2018 B. 2009-2018 C. 2018 D. TYPES OF PENDENCY E. CONGESTION 	47 53 54 55 55 56
V.	CONCLUSION	58

The Supreme Court Observer team at the Centre for Law and Policy Research, Bengaluru produced this report:

Editor

Sudhir Krishnaswamy, Co-Founder and Managing Trustee: conceptualized, structured, reviewed and wrote the report

Primary Contributor

Jai Brunner, Research Associate: co-developed the framework, collated and analyzed the data, developed the quantitative tables and graphs and wrote several drafts.

Contributor

Kruthika R, Research Associate: reviewed early drafts and responded with detailed comments, reviewed the visualizations and helped redesign

Research Assistance

Siddhant Singh, Intern: assisted in collecting data.

Design

Donna Eva, Communications Associate: designed the report including the final visualization and layout.

I. INTRODUCTION

The Supreme Court Observer's Statistics Pack 2018 ("Stat Pack") is the first in an annual series that aims to collate, analyze and present a quantitative data overview of the work of the Supreme Court of India. While the Supreme Court publishes data on a monthly, quarterly and annual basis, this information is presented in dour and non-intuitive formats. We draw inspiration from "The Statistics' of the Harvard Law Review and 'Stat Pack' of the SCOUTSBlog and adapt their analytical frameworks to look at the available data on the Supreme Court of India.

The 2018 Stat Pack has two parts: an analytical report and the accompanying data sheets. The analytical report is organized into three sections: Institution, Disposal and Pendency. This follows the categories used by the court to report its performance. While the title suggests that we cover the court in 2018, this report presents the work of the court from 1950 to 2018. The developments in 2018 are better understood against this historical background.

Further, we explore the uneven trajectory of judicial reform and pendency in the Supreme Court.

We hope that the Annual Stat Pack helps crystallize some key stylized facts about the Supreme Court. Too often debates about the Supreme Court are mired in claims about the absence or inaccuracy of the available data. While these concerns are undeniable, these stylized facts will allow us to cast aside gross errors and allow the emergence of common ground to advance a grounded public policy engagement with the Supreme Court.

NOTE

Detailed tables containing the data that we relied on are available in the Annexures.

In the text, we have rounded the numbers to the nearest 50 (when dealing with figures larger than 1000) to increase readability. For exact numbers, please refer to the Annexures.

Short-hand: Annual Report refers to the Indian Judiciary: Annual Report 2017-18. Court News refers to the quarterly Court News. Monthly Reports refers to the 2018 Monthly Pending Cases reports. All three are published by the Supreme Court of India.





II. INSTITUTION



FIGURE 1¹



DATA SOURCE: ANNUAL REPORT

¹ Institution in 2018 is only available for the months of January through October. We estimated institution for November and December via simple linear regression: y=192.35x+2316.4.

We begin this section with a brief overview of the institution of cases in the Supreme Court. In this report, 'institution' indicates the total number of cases filed in the court in any given period. The institution of cases is shaped by several factors: the interests of parties and their capacity to litigate; the substantive law that grants parties the legal rights to approach the court; and the procedural law that controls who may approach the court and the conditions they must satisfy. All these factors cumulatively shape the institution of cases in the Supreme Court.

A. 1950-2018

In this sub-section, we begin with an historical overview of institution of cases in the Supreme Court from 1950.

As Figure 1 makes clear, we have witnessed a remarkable growth in the institution of cases in the Supreme Court. In the first two decades, institution steadily increases. Thereafter, it grows exponentially with three noticeable spikes. First, from 1976 to 1984, we see a remarkable post-Emergency bump where institution increased from less than 10,000 cases to more than 50,000 cases a year. Subsequently, it drops sharply to 20,000 cases by 1993. From 1993 to 1995 we witness a post-liberalization bump where institution increased from 21,650 cases to 51,450 cases only to be followed by another sharp drop in 1995-1997 to about 31,000 cases. The third and extended phase of growth period occurred from 1997 to 2014 with a three-fold increase from about 31,000 cases to nearly 90,000 cases a year. A sharp drop followed between 2014 and 2018 and current institution rates are back to about 40,000 cases a year.

How should we understand this erratic trend in the institution of cases in the last 7 decades? Statistical anomalies arising out of bureaucratic norms that govern the recording of the institution of cases could be a cause. Alternatively, we could look to changes to substantive or procedural laws that shape the volume of litigation. Finally, these trends may be produced by other social and political conditions beyond the courts. For example, we see slow growth rates in the institution of cases and the sharpest drop when a single party secures a majority in the Lok Sabha. Political turmoil and coalition governments coincide with higher institution rates in the Supreme Court. Far more work needs to be done to explore and validate any of these alternative hypotheses, before we can explain this significant and important variable that shapes the Supreme Court's overall performance.





DATA SOURCE: ANNUAL REPORT

While we do not explore these alternative hypotheses in this study, we develop in Figure 2 a 5 year moving average of institution rates in the Supreme Court. Moving averages give us a better picture of the long-term trends in the institution rate in the court and are comparable across periods. By assessing the institution rate in any year relative to its 5-year average we get a more accurate representation of the rate of change in the institution of cases. In Figure 2 we define the 5-year institution rate as follows:

$$IR_y = \frac{I_y - m}{m}$$

where IR_y is the 5-year institution rate at year y, I_y is institution at year y, and m is the 5-year average

for institution. m= $\sum_{n=y-5}^{y-1} \left(\frac{l_y}{5}\right)$

Looking at institution in this manner, allows us to examine when changes in institution accelerate and break from the trend.

In Figure 2, we notice 4 peaks in 1966-69, 1978-83, 1994-95 and 2004 that require careful analysis. Further, we notice that the institution rate has declined in the last few years, reaching a historical minimum comparable to the low of 1987.

The moving averages chart confirms that institution rates in the Supreme Court are cyclical in nature. As the institutional structure and rules governing the Supreme Court have not changed radically in this period, we must explore how this cyclical pattern may be explained. Moreover, as underlying incentives to approach the court remain unchanged and the overall docket of cases from which one may appeal to the Supreme Court has increased across decades, why is the institution rate cyclical? Unless we are able to obtain granular data on the types of cases instituted in the court, explanations will remain conjectural. Hence, we leave these questions to next year's Stat Pack.

B. 2009-2018

We focus in this section on institution in the last decade. We noticed in the section above that there is significant variation across different time periods. A focus on the last decade provides us with the essential information on the current developments in the court.

Significantly, in the last 10 years institution of cases has decreased; from 77,150 cases in 2009 to 42,600 cases in 2018. In the first half of the decade institution was similar, hovering around 77,000 cases. But in 2014 it spiked hitting the 10-year maximum of 90,000 cases. However, from 2016 to 2018 it decreased significantly to fewer than 45,000 cases.



DATA SOURCE: ANNUAL REPORT

FIGURE 4



DATA SOURCE: ANNUAL REPORT

To examine this decadal trend, for this 10-year period we use a 2-year institution rate. The 2-year institution rate asks how much has institution increased in a given year relative to the previous 2 years? We define the 2-year institution rate as follows:



Unlike the 5-year institution rate, graphing the 2-year institution rate gives us insights into the short-term changes in institution. Changes in aggregate institution that appear to be sharply different across years flatten out when plotted as a 2 year-institution rate.

Figure 4 shows that the change in institution rate from 2014 to 2015 and that from 2016 to 2017 are essentially the same: 28% and 29% respectively. However, on Figure 3, the two decreases appear quite different. From 2014 to 2015 institution decreased by only about 10,000 cases, whereas from 2016 to 2017 it decreased by closer to 25,000 cases.

Nevertheless, Figure 4 confirms that in the last decade institution rates dropped precipitously. In 2014-15, the year a majority single party assumed control of the Union government. This unmistakable coincidence requires close analysis. While one may speculate that petitioners may be less likely to take on a majority government rather than a coalition government or that the court is less willing to admit cases when the political branches are strong, we need a better understanding of the types of cases in courts before we can conclusively show any of this to be true.

C. 2018

In this section we focus on 2018. We explore if there is a significant monthly variation in the institution of cases in 2018. While the court has an annual calender with declared vacations, there may be other factors that shape these monthly variations.

FIGURE 5[°]



DATA SOURCE: MONTHLY REPORTS

When we focus on the institution rate for each month in 2018, we see a jagged graph indicating a high degree of variation in institution across months. Not surprisingly the major dip in the year coincides with the annual summer vacation in May and June. There is a sharp rise when court reopens in July with a net increase of nearly 4000 cases. July is the busiest month with a peak in the institution of 5,350 cases that month.

It may be worthwhile to explore whether the institution figures of each month are sensitive to the roster allocation of work among judges. For that we will need more attention to the types

² Institution for November and December is estimated as data not available. Simple linear regression of the January through October data produces the following trendline: y=192.35x+2316.4.

D. TYPES OF INSTITUTION

There are two types of institution: admission and regular. When a case is first filed it is in the admission stage. If the court decides to admit it, the case enters the regular hearing stage. It is useful to analyze the ratio of admission stage and regular stage cases instituted each year. A rise or fall in either type of case may disproportionately shape overall institution figures.



FIGURE 6: LEFT Y-AXIS FOR ADM/TOTAL. RIGHT Y-AXIS FOR TOTAL.

DATA SOURCE: ANNUAL REPORT

In the last 70 years, roughly 75% of instituted cases are admission stage cases. Figure 6 graphs the proportion of admission to total institution over time.³ We pair this admission/total ratio with the total institution over time. We find that in the 1960s admission fell to its lowest relative to total institution. Roughly 50% of institution was regular institution. Subsequently, admission has on average increased and from 1999 to 2018 formed almost 90% of all institution. The large drop in aggregate institution from 2016 to 2018 was primarily due to a drop-in admission matters. While the admission/total ratio has remained at about 90% in the last decade we notice that aggregate numbers of admission stage and total institution have dropped sharply in this period.

³ Admission/Total over time. Note: 1 – (Adm/Total) = Reg/Total.

E. PUBLIC INTEREST LITIGATIONS

We had suggested earlier that unless we pay attention to the types of cases filed before the court we cannot develop an explanatory framework to understand the patterns of institution of cases in the Supreme Court. While granular data for all types of cases is unavailable, the court does separately indicate the number of Public Interest Litigations (PILs) filed to advance and represent public causes before the Court. They represent a small proportion of the Court's overall docket but may arguably have disproportionate impact on the public sphere. Citizens may file a PIL in two ways: through a writ petition or by mailing in a 'letter-petition.' Figures 7 and 8 represent the total number of PILs filed and received from 1985 to 2018⁴.

There is a curious relationship between the two types of PILs: letter petitions and writ petitions. Figures 7 and 8 suggest that both writ petitions and letter petitions increased dramatically in the early 2000s. However, while PIL writ petitions have dropped to historical lows in 2016-2017, letter-petitions have not. In 2018, the number of writ petitions (150 petitions) is not significantly greater than it was in 1985 (107 petitions). By contrast the number letter-petitions has doubled from 24,700 in 1985 to 51,350 in 2018.



⁴ Data not available prior to 1985.

FIGURE 7[°]



⁵ Letter-petitions and writ petitions for 2018 only represent those received/filed until October 2018. Court only began recording PILs in 1985.

We find no direct correlation between letter-petitions received and writ petitions filed. One can test this by taking the lineaer correlation coefficient between the two sets of data. A linear correlation coefficient describes the likelihood that two sets of data are related. The closer it is to 1 (or -1), the more likely it is that the two sets of data are correlated. This indicates that changes in the first set of data relate directly to changes in the second set of data (or vice versa)⁶. We found that the linear correlation coefficient between letter-petitions received and writ petitions filed is 0.247. This is a small coefficient and indicates that there is no statistically significant linear drelationship between them. Generally, in order for a coefficient to suggest a significant relationship, it should be greater than 0.8 (or less than -0.8).

As letter petitions allow for unmediated access to the general public to approach the Supreme Court to address their grievances, they appear to be immune to other social and political conditions. However, PIL writ petitions are very sensitive to these conditions. Further, as the court enjoys significant discretion in allowing PILs, the court may effectively control the number of PILs filed. Whatever may be the reasons for this precipitous drop, it is fair to announce the demise of the PIL writ petition in 2018.

It has often been suggested that the extensive filing of PILs has crowded out the institution of other cases in the Supreme Court. However, when we examine the correlation between writ petition PILs filed and institution we do not find a negative correlation between these filing rates. In fact an increase in PIL writ petitions coincides with an increase in institution rates of all cases. For the period between 1985 and 2017, the correlation coefficient is only 0.51 which is positive but statistically insignificant. So not only is the overall numbers of PILs filed an insignificant part of the overall court docket, there is no statistical evidence to suggest that PIL filing rates affect overall institution rates in the Supreme Court.

⁶ Correlation is not causation





DATA SOURCE: ANNUAL REPORT



III. DISPOSAL

In the section above, we noted the remarkable drop in the institution of cases in the Supreme Court in the last decade. Shouldn't this lead to a dramatic increase in court time and increased disposals? In this section we review the second aspect of the performance of the Supreme Court: disposal of cases. Disposal indicates the number of cases that exit the Supreme Court in a given period. Disposals include the dismissal of petitions at the admission stage or after a full hearing. Several factors shape disposal including the institutional capacity of the court, procedural rules framed by the court and Registrar and the institution of cases.

A. 1950-2018

In this sub-section we chart a historical perspective of disposals by the court from the 1950s until 2018.

Like institution, disposal per year increased gradually from the founding of the Supreme Court in 1950 till the middle of the 1970s, after which it ebbs and flows sharply. Strikingly, disposals closely mirror institutions (see Figure 1), peaking in 2014 and a rapidly falling in recent years. This mirroring between institution and disposal, suggests that disposal numbers are driven largely by the cases disposed at the admission stage. So when aggregate institution falls so does aggregate disposal. We will revisit this correlation again in Section III.





DATA SOURCE: ANNUAL REPORT

⁷ Disposal for 2018 is estimated. In 2018, disposal data only available until October 2018. Values for November and December are estimated using the following linear trend line: y = 124.49x+2616.4





DATA SOURCE: ANNUAL REPORT

Figure 10 traces the 5-year average disposal rate from 1955 to 2018. We track the disposal in any year relative to the average disposal for the previous 5 years. This allows us to view trends in disposal rates in the Supreme Court that are comparable across the decades.

 $DR_{y} = \frac{D_{y}-m}{m}$ where DRy is disposal rate at year y, Dy is disposal at year y, and m is the 5-year average for disposal. $m = \sum_{n=y-5}^{y-1} \left(\frac{D_{y}}{5}\right)$

The disposal growth rate hits its historical maximum in 1983 at 135%. Net disposals continue to grow till 1985, though the 5-year disposal rate was 75% that year. The disposal rate hit its historical minimum in 2018, falling to -48%. In 1988 it hit a similar low, falling to -47%. Both these minimums correlate to low net disposals in the aggregate disposal graph in Figure 9. Significantly, since 2014 disposal rates have hit record historical lows.

A key reason for this low rate is that disposal rates closely follow institution rates. As institution rates in the Supreme Court have collapsed since the formation of a majority government in 2014, disposal rates have also cratered. As we noted earlier in this section, this suggests that disposals are driven primarily by decisions made at the admissions stage. Arguably, the decline of SLP filing⁸, and the corresponding decline in preliminary stage disposals is not a sign that court capacity has been eroded.



⁸ SLP's comprised 86.5% of the docket in 2007 (historical maximum). In 2014, this deceased to 80.2%. [ADD CITATIONS: Nick Robinson, Quantitative Analysis of the Supreme Court; Alok Prasanna Kumar et al, Towards an Efficient and Effective Supreme Court]

B. 2009-2018

In this sub-section, we focus on disposals in the last decade. Disposal hit a peak in 2014 and ever since, has declined.

In the past decade disposals have decreased from 71,200 cases in 2009 to 40,850 cases in 2018. Disposal hits its maximum in 2014 with 92,700 cases and subsequently falls to its 10-year minimum in 2018 with 41,107 cases, a 56% decrease. If this trend continues then aggregate disposals will be down to 1980 levels by the end of the decade. There has been little public recognition of this dramatic reduction in workload in the Supreme Court. Ironically the working strength of the Supreme Court has grown at the same time. Arguably, if this decline is primarily driven by the fewer SLPs instituted in recent years, it has opened up significant court time for adjudication of long pending final hearing cases.

Figure 12 plots the 2-year disposal rate in the past decade. The 2-year disposal rate is defined just as the 5-year institution rate is:

 $\mathbf{DR_y} = \frac{\mathbf{D_y} - \mathbf{m}}{\mathbf{m}}$

where DR_y is the 2-year disposal rate at year y, D_y is disposal at year y, and m is 2-year average disposal. $m = \frac{D_{y-1} + D_{y-2}}{2}$

The 2-year disposal rate indicates changes across the shorter term and makes the trends across the years comparable. Figure 12 confirms that even when we compare disposals in the last decade, the sharp decline in aggregate disposal and disposal rate in the Supreme Court is a remarkable historical occurrence that deserves close analysis.across the years comparable. Figure 12 confirms that even when we compare disposals in the last decade, the sharp decline in aggregate disposals in the last decade, the sharp decline in the Supreme Court is a remarkable historical occurrence that deserves close analysis are in the last decade, the sharp decline in aggregate disposal and disposal rate in the Supreme Court is a remarkable historical occurrence that deserves close analysis.



DATA SOURCE: ANNUAL REPORT



DATA SOURCE: ANNUAL REPORT

C. 2018

Finally, we review disposals by month in 2018. While the court vacation might impact disposal, other factors may shape the monthly variations.

FIGURE 13[°]



DATA SOURCE: MONTHLY REPORTS

Figure 13 suggests that disposals are seasonal with the two troughs for the March and June vacations followed by two peaks in April and July. Disposals mirror the institutions pattern each month in 2018 (see Figure 5). In order to develop a more incisive account of why the disposals vary so much by month, we need to consider the different types of disposals – namely, admissions stage and after final hearing.

⁹ In 2018, disposal data is only available until October 2018. Values for November and December are estimated using simple linear regression: 124.49x+2616.4

D. TYPES OF DISPOSAL

As with institutions, disposals can be divided into admission and regular cases. The court can dispose a case at the admission stage or after a final hearing. Once a case has been admitted, the court will decide the matter and may also deliver a reported judgment in the case. Therefore, we may identify three types of disposal: admission stage, final hearing stage, final hearing with reported judgment. We will examine all three types in the analysis below.

In Figure 14 we plot the aggregate disposals from the 1950s to 2018. We also plot the percentage of admission stage disposals to total disposals across this period.



FIGURE 14: LEFT Y-AXIS FOR ADM/TOTAL. RIGHT Y-AXIS FOR TOTAL.

DATA SOURCE: ANNUAL REPORT

We notice that disposals peaked in 2014, after which they're in free fall till 2018. Historically, around 77% of disposals are admission stage cases and 23% regular hearing cases. In the 1960s admission stage disposals fell to about 50% of total disposals but have risen steadily since. For the last two decades admission stage disposals account for between 80-90% of all disposals with a high of 92% in 2011 and a low of 82% in 2014.





DATA SOURCE: ANNUAL REPORT

There appears to be no strong relationship between the admission stage disposal percentage and overall aggregate disposal. Meaning, changes in the proportion of cases that are in the admission stage (and regular stage) are likely not causing changes in the total number of cases being disposed. In particular, while the admission to total disposal ratio followed roughly a parabolic trajectory, with maximums both in the 1950s and the 2010s, aggregate disposal has continuously increased along an exponential path. In 1983-84 and 2014-15 the admission stage disposal rates drop but aggregate disposals rise. Both those periods are marked by the formation of strong majority governments and a fall in institution rates. From 2014 onwards, while aggregate disposals have dropped sharply the percentage of cases in the admission stage has remained above 80%.

Next we turn to analyze the number of reported judgments issued by the Supreme Court since 1950. We had noted earlier that reported judgments might be issued in some regular hearing cases. Figure 15 shows the proportion of cases that are disposed of during regular hearings that see judgments, over time.

Curiously in 1950 the data suggests that the court delivered more judgments than the number of regular hearing cases disposed in the year! On average, the court has issued reported judgments in 16.4% of regular hearing cases. The judgment rate rose to 36% in 1956 and 44% in 2008. In the mid-1980s judgments were issued in only 2% of the regular hearing cases. However, this fall in judgment rate coincides with a spike in both regular hearing disposals, which suggests that the number of judgments delivered were roughly the same.

In Figure 16 we continue to explore the relationship between regular hearing disposals and judgments issued.

While generally, the reported judgments issued closely follow the disposals of regular hearing cases albeit in different scales this begins to change in the mid 1970s. Around 1974, during Emergency, regular disposals start to climb while reported judgments fall to a low of 104 in 1984. However, from the mid 1980s the reported judgments start to climb steadily till 1993 and then very sharply thereafter. In this period regular hearing disposals show a yo-yo pattern with sharp changes from year to year. In 2008, there is a sharp spike in reported judgments to more than 2000 that year, but unlike the 1990s there is a sharp fall in the disposal of regular hearing cases. By 2014 there is a sharp reversal with a high number of disposals of regular hearing cases and a sharp drop in cases where a reported judgment is issued. Taken together, there is no strong correlation between the disposal of cases in regular hearings and judgments.¹⁰ One may expect an inverse relationship, as judgment writing is arguably the most time consuming aspect of adjudication. However, the analysis above suggests that aggregate reported judgments in isolation do not have a bearing on regular hearing disposals in court.

It should be noted that Figures 15 and 16 capture judgments published on the Supreme Court's official website. The court does not publish all of its judgments on its website. In addition, there exist discrepancies between the number of judgments published on the court's website and other reporting agencies, such as SCC Online and Manupatra.¹¹ The court has delivered more judgments per year than we have captured. More research needs to be done to verify if the real number of judgments delivered follows the same rate of change we have described. Revised numbers may show that a majority of regular hearing cases are disposed through judgments.

¹⁰Linear correlation coefficient = 0.433

¹¹Even when one accounts for 'reportable' / 'non-reportable'



FIGURE 16: LEFT Y-AXIS FOR JUDGMENTS. RIGHT Y-AXIS FOR REGULAR DISPOSAL.



DATA SOURCE: ANNUAL REPORT AND SCI WEBSITE

E. JUDGEMENTS IN 2018

In this part we deep dive in to an analysis of reported judgments delivered in 2018. In particular we ask how long are judgments, which judges write judgments and what is the age of the cases that are settled by reported judgments. These questions give us a brief overview of the court's performance with respect to cases settled by reported judgments. This is a section of the cases decided by the court and is not a representative sample. Hence, the conclusions reached in this section offer only a snapshot of judicial performance. A comprehensive picture would require accurate data on all judicial functions performed by judges of the court. As the court does not release data with such granularity, we will have to make do with what the available data.

İ. AVERAGE LENGTH

The Indian Supreme Court is well known to issue extraordinarily long judgments. So we explored whether this was generally the case with all reported judgments or simply the exception for landmark judgments that receive extensive media coverage. We counted judgment length in terms of number of pages in each judgment in the PDF published on the official Supreme Court of India website.¹² While number of words would offer a more accurate account as it would eliminate discrepancies in formatting and layout, given our limited resources and time we stuck to the number of pages.

Figure 17 makes it clear, that the 1448-page judgment in the Aadhaar case is an extreme outlier in the judgments delivered by the court.¹³ Other Constitution Bench judgments are also outliers as the average page-length¹⁴ of judgments in 2018 is 21 pages. The median was 12 pages. The Court even delivered six 1-page judgments.

The normal distribution graph is right skewed, meaning most of the data points are on the left of the graph. The right skew indicates that most judgments are shorter than the average judgment length. The median is less than the mean (the mean is the highest point on the bell curve). The mode, or the most frequently occurring judgment length, is only 3 pages. The right skew is also illustrated by the large number of outliers on the right side of the graph.

¹²We encountered many discrepancies with judgments reported on the Supreme Court website. From judgments being paired with the wrong case to entirely missing judgments, there are a range of issues with the website. Nevertheless, the majority of reported judgments appear to have no errors. Hence, for the purpose of looking at the distribution of judgments lengths, the website is sufficient.

¹³ Justice K.S. Puttaswamy v. Union of India; Writ petition (Civil) No. 494 of 2012

¹⁴Page-length as per judgments published on official Supreme Court of India website: www.sci.gov.in

GREATER THAN	NUMBER OF	PERCENTAGE OF
50 PAGES	77 JUDGEMENTS	6.8%
100 PAGES	23 JUDGEMENTS	2.0%
200 PAGES	10 JUDGEMENTS	0.8%



DATA SOURCE: SCI WEBSITE



DATA SOURCE: SCI WEBSITE

ii. AUTHORSHIP

We provide an overview of the number of judgments each sitting Justice¹⁵ authored in 2018. In some courts like the United States, where the court sits en banc, all judges hear all the cases before the court. In the Indian Supreme Court, judges hear cases in division benches and hence the type and number of cases allocated to each judge varies. Moreover, judges hear thousands of admission stage matters and regular hearing matters that do not result in a judgment. Hence, the description below provides us with a preliminary but partial account of the reported judgments issued by the court.

In 2018, Justice Kurian Joseph authored by far the highest number of judgments, producing 230 judgments. Retired Chief Justice Dipak Misra sits on the third quartile, having authored 39 judgments. Chief Justice Gogoi authored only 13 judgments. The average was 36 and the median was 22 judgments. This wide variation in the number of judgments issued by each judge may be explored in varied ways.

We may consider the rate at which a particular judge issues judgments relative to the number of Benches a judge sits on. The question becomes, 'how many judgments did the Court produce relative to the number of Benches he/she sat on?' This gives us a judgment-Bench ratio: J/B*100. Often a judgment-Bench ratio is taken to indicate the influence a judge might have in assigning the lead opinion to a member of the Bench. In 2018, the average judgment-Bench ratio for all judges was 28% and the median was 29%. Remarkably, Justice Kurian Joseph had a ratio of 85%, while Retired Chief Justice Dipak had a ratio of 21% and current Chief Justice Ranjan Gogoi was at 13%.

It must be emphasised that the number of judgments a judge authors does not convey a judge's productivity. Not all judgments are qualitatively the same.¹⁷ The above findings should only be viewed as preliminary.

¹⁵We counted all Justices who sat in 2018, including those who retired or were elevated during the year.

¹⁶The number of Benches a judge sat on was found on Manupatra website, using its judges analytics feature: https://www.manupatrafast.com/analytics accessed on 25 June 2019.

¹⁷ One way to begin to see this is to consider the average length of judgments authored by a judge, treating length as a rough proxy for complexity. For example, in the month of September the average length of Justice K Joseph's judgments was 6 pages for 21 judgments. By comparison Chief Justice Gogoi only authored 3 judgments, but their average length was 9 pages.

İİİ. AGE

We conclude this section by analysing the length of time a case is pending before it is disposed by a judgment.

Figure 19 shows that nearly 40% of all judgments delivered in 2018 were filed in 2017 or 2018. More than 80% of all cases where a judgment was delivered in 2018 were filed after 2012. This suggests that the court prioritizes writing judgments in recently filed cases over long pending cases.

We are unable to strongly assert that there is a skew towards deciding recently filed cases for several reasons. First, as we do not have an age breakdown of all cases listed for final hearing in the Supreme Court it is unclear whether the age of the cases where a judgment is issued shows a different distribution. Secondly, cases where a judgment is issued form a small subset of cases disposed of every year. As noted earlier almost four-fifths of cases disposed are at disposed of at the admission stage. Of the disposals after final hearing, judgments are issued in about 60-80% of the cases. Hence, the age of judgments data only is an unrepresentative sample of the cases disposed of by the court in any given year.

Nevertheless, it is useful to recognize that the court does not appear to have adopted a 'First In / First Out' policy for disposal. More work needs to be done to ascertain whether there is a policy that governs how cases are listed for disposal or whether this is the result of an ad-hoc process driven by registry or judicial preferences.





DATA SOURCE: SCI WEBSITE





DATA SOURCE: SCI WEBSITE

¹⁸Working strength was determined by taking the average working strength per month. Working strength on each month was taken on the last day of the month.

F. INSTITUTIONAL CAPACITY

In this part of the Stat Pack, we've focused on the various ways in which the data available on case disposal in the Supreme Court illuminates our understanding of the court at work, and potentially signals pathways for reform. We conclude this Part with a short section on the institutional capacity of the court. A comprehensive analysis of institutional capacity would pay attention to the number of judges, staff and the budgets available to the court. In this section we confine our analysis to the data available on the number of active sitting judges. As the number of judges varies each month of the year, we counted working strength for each year of the last decade as the average of the monthly working strength in each year. In any given month, we check the working strength on the last day of a month. Hence, where a judge retires on 17 June, we do not include that judge in the June count.

Over the last 10 years, working strength has varied significantly. At the start of the decade in 2009 it was a low of 23, rising to a high of 28 in 2010 and 2011. The 10-year average is 26 judges each year and we ended the decade in 2018 just below the average with 25 judges. In public discussions increasing the working strength of the Supreme Court has been proposed as a solution to the crisis of pendency of cases. Hence, it is useful to explore if there is a relationship between working strength and case disposal.

Figure 21 captures the linear correlation coefficients between working strength and four variables: disposal, admission disposal, regular disposal and judgments for the 2009 to 2018 period.

The absolute value of all of the correlation coefficients is between 0.25 and 0.75, suggesting weak to medium correlations. If there were strong positive correlations, we would expect co-efficients greater than 0.8. It is unclear whether increasing working strength increases disposal (nor individual types of disposal).

There is a positive linear relationship between working strength and final hearing, admission stage and total disposal. Working strength shares correlation coefficients of 0.29, 0.40 and 0.45 with each variable respectively. It is not surprising that the correlation is stronger to admission stage disposals as these form the bulk of case disposals in any given year. However, working strength and judgments have a negative correlation coefficient of -0.52. In the last decade, when working strength has increased, the number of judgments delivered decreased. This is a surprising result that deserves to be investigated.

It must be noted that what we have examined are linear correlation coefficients. This does not capture potentially non-linear relationships. For example, it is possible that working strength and disposal share a second or third-degree polynomial relationship.¹⁹ Assuming a non-linear relationship, it may be possible to assert with a high degree of certainty that increasing working strength will increase disposal over a given time period. We are currently exploring these relationships and will publish these findings as we reach a conclusion on these questions.

¹⁹ We found that the correlation coefficient between working strength and disposal increased, if we performed non-linear regression. Further study is required.





DATA SOURCE: SCI WEBSITE



IV. PENDENCY

In 2018 the Supreme Court published, with the Indian Law Institute, a handbook titled a 'National Initiative to Reduce Pendency and Delay in (the) Judicial System²⁰. The title of the handbook confirms that pendency and delay remain at the centre of proposed reform of the judicial system. However, it is crucial to clarify the terms used to describe this phenomenon as Chief Justice Mishra attempts to do in Chapter 1 of the handbook. We may begin by exploring a simple descriptive concept of pendency. Pendency refers to all cases instituted in the court and undisposed at the end of the year. It is calculated as the difference between institution and disposal.

$P_y = P_y - 1 + (I_y - D_y)$

where P_{y} is pending cases at year y, ly is institution at year y and D_{y} is disposal at year y.

For a given year, if more cases are instituted than disposed, then pendency will increase. Where more cases are disposed than instituted pendency will decrease. To eliminate pendency, the court needs to dispose all instituted cases as well as the 'backlog' of pending cases accumulated over time.

To pendency we may add a normative concept of arrears. Where a case or proceeding is pending for longer than the normative period allocated to this type of case or proceeding, the case may be added to the arrears before the court. As this description suggests pendency is the larger category of which arrears will be a part. Further, to arrive at an estimation of arrears, we need normative benchmarks for each type of case before the court. In this Stat Pack, we do not engage in this arduous exercise as the court has not provided granular data necessary for such an evaluation.

In this Stat Pack we focus on institution and disposal of cases, as these are shaped primarily by party motivations and institutional capacity respectively. Pendency is the result of the interaction between the institution and disposal variables and hence it cannot be directly tackled. However, when we analyze pendency we gain insight into whether institution rates or disposal rates are driving pendency numbers, which hints at likely solutions.

²⁰The Supreme Court of India and the Indian Law Institute, National Initiative to Reduce Pendency and Delay in Judicial System (Mittal Enterprises 2018).

A. 1950-2018

It is common to assert that pendency has reached alarming proportions in the Supreme Court. However, as Figure 22 below shows, there has been uneven growth in pendency between 1950 to 2018 marked by two periods of exponential growth: from 1950 to 1991 and from 1997 to 2013. These growth spurts are punctuated by sharp declines. In 1993, pendency was reduced by 39,250 cases as the Registrar changed its method of clubbing similar cases. This continued till 1997 due to the efforts of *'district court judges and other judicial officers to club matters together more effectively'*.²¹The second decline in pendency begins in 2013 and is ongoing. There has been less analysis of this contemporary decline and we will explore this further in part B.



FIGURE 22

DATA SOURCE: ANNUAL REPORT

²¹Nick Robinson, 'Quantitative Analysis of Indian Supreme Court's Workload' (December 2012) Centre for Policy Research http://www.cprindia.org/sites/default/files/articles/SSRN-id2189181.pdf> accessed on 28 May 2019.

In Figure 23 we explore the relationship between pendency and institution and disposal in the court. Where the institution curve rises above the disposal curve, pendency increases. We had noted earlier in Section 2 that institutions and disposals are strongly correlated.²² When institution increased sharply in the early 1980s and mid-1990s, disposal followed the same track.

Aggregate disposals rise above institutions for significantly in 1991 and stay that way for most of the 1990s leading to the most rapid decline of pendency in the Indian Supreme Court's history to a low of 19032 in 1997 (last seen in 1979). However, this reversed in 1998 leading to a steady increase in pendency until 2012. From 2012 aggregate disposals have topped institutions and pendency has begun to decline once again. In 2018, both institution and disposal dropped below pendency. This marks the reversal of almost a 25-year trend, where institution and disposal continuously remained greater than pendency.

Since, aggregate institutions and disposals have dropped by 50% since 2016, the Supreme Court has a historic opportunity to engage in substantive judicial reform to contain or eliminate pendency. However, unless the court increases disposals without a corresponding increase in institution, pendency will remain stubbornly high. Earlier in this Stat Pack, we showed that the close correspondence between institution and disposal was driven primarily by admission stage matters. If the court can increase final hearing stage disposals, while keeping a lid on admission stage filings, pendency will reach historic lows.

²²Correlation coefficient = 0.981



FIGURE 23²³



DATA SOURCE: ANNUAL REPORT

 $^{^{23}}$ 2018 data for institution and disposal only available until October 2018. Institution and disposal for November and December estimated via simple linear regression. Institution: y=192.35x+2316.4. Disposal: y = 124.49x+2616.4

So far in this section we have analyzed aggregate pendency numbers. However, to meaningfully compare pendency across different historical periods we need to plot the pendency rate to highlight proportional changes in pendency. Figure 27 graphs the 5-year pendency rate: the rate of change of pendency in proportion to its 5-year moving average. We have defined the 5-year rate as follows:

$$\mathbf{PR}_{\mathbf{y}} = \frac{\mathbf{P}_{\mathbf{y}} - \mathbf{m}}{\mathbf{m}}$$

where PR_y is the 5-year pendency rate at year y, P_y is pendency at year y, and m is the 5-year average for pendency. m = $\sum_{n=y-5}^{y-1} (\frac{P_y}{5})$.

Figure 24 reveals, that the pendency growth rate rapidly accelerated in the 1960s and in the post-Emergency period (1975-1982) The pendency rate rose to 100% in 1957, 1967 and 1982. It fell to -60% in 1996 for administrative reasons discussed at the beginning of this section. Pendency rates are sensitive to the base on which the rates are calculated. So, while the sharp spikes in the 1960s and 1970s are on a smaller base, the steady increase from 1996 on a much larger base has an enduring impact on aggregate pendency.

Overall, the 5-year pendency rate shows that pendency accelerates in cycles. The period of these cycles appears to be reducing over-time. If we count time between two peaks as one period, the period has increased from 9 years to 35 years. Pendency rate, rather than aggregate pendency, gives us a better insight into the direction in which the court is moving in any period. When a court improves its processes and management, this will show up in a decreasing pendency rate.





DATA SOURCE: ANNUAL REPORT



DATA SOURCE: ANNUAL REPORT

FIGURE 26



DATA SOURCE: ANNUAL REPORT

B. 2009-2018

In the last decade, aggregate pendency has remained relatively stable. However, it did experience significant growth in the first three years, growing to a peak of 67,000 cases in 2012. It has dropped steadily since. Significantly, in 2018 aggregate institution and disposal case numbers are below aggregate pending cases. This means that more cases are pending before the court than are instituted in any given year. If the court redirects attention to final hearing cases, then we may see a historic drop in pendency in the rest of the decade.

Surprisingly, in 2018 pendency increased, reversing a 5-year decline. Aggregate disposals dipped marginally below the aggregate institution in mid-2018. This increase in 2018 may be like the mid-2016 increase which moderated in the second half of the year and in 2017. Though final figures are yet to released, the data available in 2019 suggests as of 1 May 2019, pendency has marginally increased to 58,150 cases.

We can further analyse the last decade by considering the 2-year pendency rate, which captures how pendency has changed in proportion to its 2-year moving average over time.



Unlike the sharp variations in the three preceding decades, Figure 26 shows that pendency rates have remained relatively stable in the past ten years. As the court has gained in working strength over this decade, and institution rates have dropped to historic laws, stagnation in pendency numbers suggests that more needs to be done to improve how the court processes final hearing cases.

C. 2018

When we track pendency in each month in 2018 we see a pattern related to the annual institution and disposal numbers. There is a seasonal dip in pendency at the start of the year, where pendency decreased by 1,450 cases, which then turns steadily upwards from the Summer Vacation till the end of the year reaching a high of 57,350 cases in December. There is no evidence that the vacation periods decrease pendency by permitting judges to dispose a number of matters while the court is not in session.

FIGURE 27

DATA SOURCE: ANNUAL REPORT

D. TYPES OF PENDENCY

Cases pending before the Supreme Court are of two types: admission stage or regular stage cases.²⁴ In this section we consider whether increases in pendency are more driven by admission or regular hearing matters. We focus on the proportion of pending admission cases to all pending cases - admission/total ratio. This ratio reveals whether the overall pendency of cases is shaped by admission stage cases or regular stage cases. If the ratio is greater than 0.5 then admission stage cases are driving the overall pendency figures in the court.

FIGURE 28: LEFT Y-AXIS FOR ADMISSION/TOTAL. RIGHT Y-AXIS FOR PENDENCY.

DATA SOURCE: ANNUAL REPORT; MONTHLY REPORTS

Admission pendency has on average constituted 44% of the court's pendency over its history. Significantly, admission stage cases form a much higher percentage of cases instituted and disposed each year – 75% and 77% respectively. The percentage of admission to total pendency was at its highest in 1950, where it was 79%. Just 16 years later, it was at its lowest falling to just 22%. In the last 10 years, a majority of pending cases have been in the admission stage – the 10-year average has been 58%.

Figure 28 demonstrates that when pendency has significantly increased, the proportion of pending cases which are in the admission stage has also increased. Notably, the two large increases in pendency are prefaced by increases in the admission to total pendency ratio. When we examine the period from the mid 70s to mid '90s, we see that change in pendency mirrors change in the ratio. Likewise, the same holds true for the period from the early 2000s to today.

²⁴If a pending admission stage case is admitted, then it is only pending at the regular stage and no longer at the admission stage.

Looking forward, it appears that pendency is likely to continue rising as the admission/total pendency ratio is rising from 2014 to 2018. Notably, while admission stage pendency has risen from 34,450 to 36,450 cases, regular stage pendency has declined from 28,350 cases to just 20,900 cases. As the court successfully reduces its regular stage pendency which requires greater court time and resources, it is plausible that the admission/total pendency may rise but overall pendency will fall. All said these ratios provide valuable insights into the ongoing institutional shifts and likely outcomes in the Supreme Court.

E. CONGESTION

A simple measure for determining the time required to dispose of pending cases is to evaluate a congestion ratio between aggregate pendency and disposal in any year²⁵ By dividing the number of pending cases on a given year by the number of disposed each year, we can assess the number of years the court would take to eliminate its pending cases in full.²⁶ Congestion ratios are useful guides to potential litigants to assess how long their cases need to be resolved.

For 2018, congestion is 1.395, meaning that if no new cases were instituted, it would take the court approximately 1.395 years (1 year, 4 months, 3 weeks) to clear the backlog. Currently, the congestion rate is very close to its historical average of 1.380. Given that aggregate pendency is relatively high at around 58,000 cases, it is remarkable that the court has maintained a congestion rate around 1.395. However, the sharp rise in the congestion rate in 2017-18 suggests that we must brace for rising pendency in the years ahead.

We conclude this section with another important ratio called the clearance rate. The clearance rate is the proportion of disposal to institution of cases in any given year: disposal/institution. If the clearance rate is not above 1, it does not matter if congestion is low, pendency cannot decrease. Only when the court is disposing of more cases than are being instituted, can pendency decrease. The court's average clearance rate across time is 0.92, which has resulted in the high aggregate pendency figures we contend with today. In 2018 the clearance rate is 0.96, which is an improvement on the long historical average but insufficient to make a serious dent in the overall pendency in the court.

²⁵Arnab K. Hazra, Maja B. Micevska, The problem of court congestion : evidence from Indian lower courts (2004) ZEF Discussion Papers on Development Policy, University of Bonn.

²⁶Congestion = Pendency/Disposal

FIGURE 29: LEFT Y-AXIS FOR CONGESTION. RIGHT Y-AXIS FOR PENDENCY.

DATA SOURCE: ANNUAL REPORT

The last 10 years have seen more civil society organizations and academic projects unpacking the Supreme Court than at any time in the history of India. Despite considerable resources being spent on new technological methods of aggregating data, we remain without a shared understanding of the basic parameters to advance a popular understanding of the court.

Are more or fewer litigants approaching the court? Does increasing working strength reduce pendency? Is the number of pending cases increasing or decreasing?

The Stat Pack allows us to reach common ground on certain truths about the Supreme Court. These truths enable us to have essential debates about the court without being hazed by tropes or claims of the absence of data or inaccurate data.

One such truth is that institution is at a historical low in 2018: it has fallen to 42,800 cases, the lowest it has been since 2001/02. Institution has dropped dramatically before, after periods of intensive growth, however never to such an extent. It will likely begin to increase again in a short amount of time. The court has a unique opportunity in this current period to reduce pendency, by increasing disposal.

Unfortunately, disposal has also undergone a dramatic fall. In 2018, it sits at 41,100 cases which correspond to 2001/02. This drop in disposal is unsurprising given that disposal has historically mirrored institution. In particular, admission stage disposal has very closely matched admission stage institution. The court will likely find the most success in reducing pendency, if it focuses on increasing regular hearing disposal.

For the first time in roughly 30 years, pendency is greater institution. This is a unique and historic opportunity to reduce pendency. If the court can maintain the level disposal it had from just a few years ago, it could reduce pendency dramatically. However, the historical trends are somewhat against it. As discussed, disposal traditionally drops when institution drops. Further, a historical analysis of pendency rates shows that it appears to be reaching the end of a downward cycle. The court may have to innovate in order to counter these trends.

Looking forward, for next year's Statistics Pack 2018 we aim to capture some additional parameters.We will include a case type distribution. How is the case type distribution changing over time? Are there certain types of cases that the court is better at disposing of, such as SLPs?