

2017

Recent Performance Changes on the California Bar Examination (CBE):

Insights From CBE Electronic Databases

Results from the 2008, 2012 and 2016 administrations of the CBE are analyzed to determine the impact of the examination and examinee characteristics on the decrease in scores and passage rates

DR-01-17

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2/19/2017



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EXECUTIVE SUMMARY

The recent sharp drop in the percentage of applicants passing the Bar Examination in multiple states, including California, has generated considerable public debate regarding possible causes. The California Committee of Bar Examiners requested that the Research Solutions Group (RSG) conduct analysis of existing California Bar Examination (CBE) databases to: 1) establish a statistical baseline to profile the changes in passing rates that have occurred in California; and 2) determine if any insight could be provided from these databases into the factors that might have contributed to the decline in scores. On the basis of the data available, six research questions were posed to guide the analyses.

Data from the 2008, 2012 and 2016 examinations were analyzed. Over this 9 year period the following changes occurred:

- The number of test takers declined by 6% including an 11% decline in the number of July test takers and a 4% increase in February examinees.
- The mix of examinees shifted, with traditionally higher performing groups making up proportionately less of the total test takers over time.
- For the July exams, overall average Total Scale Scores (TSS) and bar passage rates dropped between 2008 and 2016: The average TSS declined 66 points (1481 to 1415) points and the percentage passing was 18% lower (62% to 44%) in 2016 than in 2008. Less pronounced decreases also occurred in the February exams between the two years.

The magnitude of the changes was not equal for all subgroups within applicant populations. The passing rate for applicants from CA ABA schools with higher median LSAT scores dropped 11% between 2008 and 2012 as compared to an almost 30% decrease for applicants from lower LSAT schools. The drop in passage rates in the various racial/ethnic groups varied by only 5% however. Additionally, the drop in scores on the Written and MBE sections were roughly equivalent within the various groups, suggesting that neither section disproportionately contributed to the change.

Results from an estimation model indicated that all things being held equal, roughly 20% of the change in July CBE scores and 17% of the change in bar passage rates could be attributed to the change in the mix of test takers between 2008 and 2016. Analyses also revealed a highly disproportionate number of test takers scored at the very lowest levels of the score distribution in 2016 relative to 2008 (21% vs 10%). A comparison of the composition of test takers scoring in this bottom portion of the distribution also revealed a disproportionate change across selected subgroups.

An analysis of “two-year” pass rates indicated that gaps in performance between 2008 and 2016 narrowed considerably, while an analysis of the reliability of the CBE actually showed very slight improvements on both the individual sections and overall scores.

Finally, analyses were conducted to evaluate the impact of alternative passing standards, or “cut points”, upon the decline in passage rates. If the modal U.S. standard of 135 were applied instead of California’s existing standard of 144, it is estimated that 22%

more applicants would have passed the July 2016 CBE. The size of the decrease between 2008 and 2016 would have shrunk by 3%. Finally, if California were to use a standard of 133 (the passing score applied in New York state), the decrease in passing rates between 2008 and 2016 was estimated to be identical (9%) to New York's for similarly situated applicants. Since New York adopted the Uniform Bar Examination in 2016 this finding suggests that use of the UBE format in California would probably have had little to no effect on the decrease in bar passage. Further, the change in passing rates for 1st time students from California ABA schools between 2008 and 2016 were similar to other states with large applicant pools.

These results suggest that there are most likely other factors beyond those examined in these analyses which are affecting the CBE passage rate. Institutional factors such as changes in curriculum and/or variation in student characteristics such as motivation, preparation and/or latent legal ability and law school performance may be operating. In the absence of additional data, however, we cannot assess the impacts of such variables. The nature, size and directionality of these decreases require additional data.

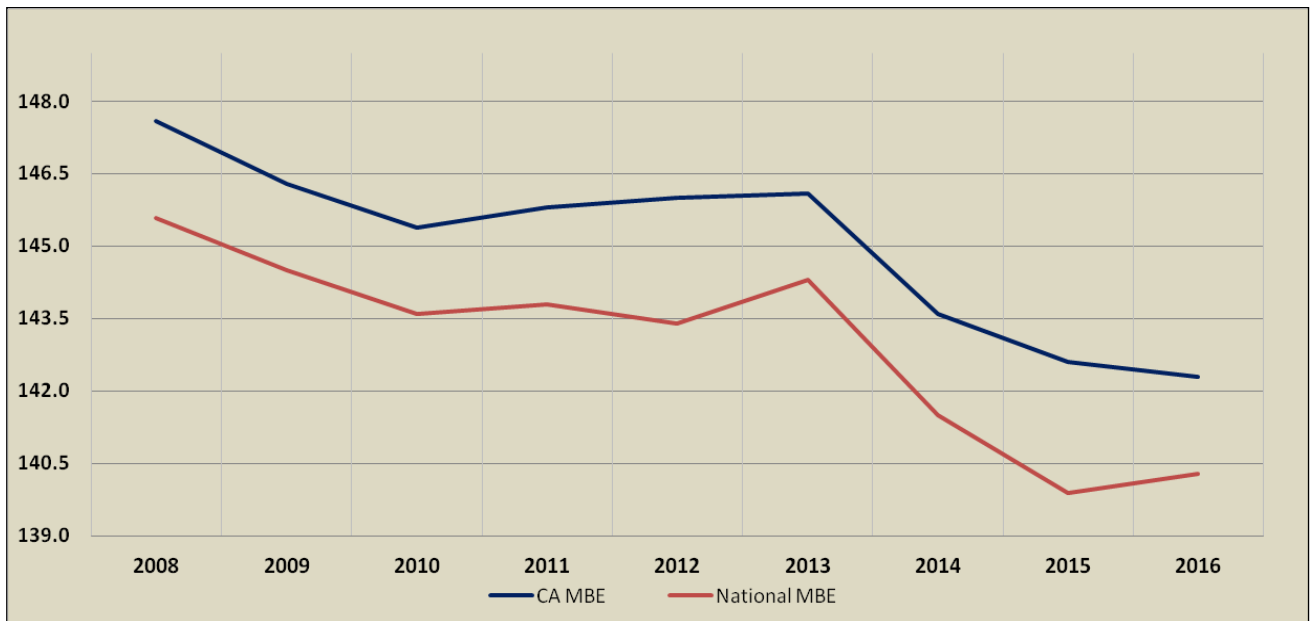
Finally, this study did not address whether the content of the CBE remains relevant to assessing the minimum competency to practice law, or whether the current standard remains appropriate in today's practice environment. These are issues that would also require different data and study methods.

I. BACKGROUND

In recent years, there has been a fairly steady decrease in the passing rate on the California Bar Examination (CBE). From its recent peak in July of 2008 to the most recent 2016 July administration, the percentage of applicants passing the exam has fallen by 18% (from 62% to 44%). The decline has been a steady one. During no 8-year period since the examination was in its current configuration has the passing rate decreased by this amount. This downward trend mirrors a similar pattern observed in the average Multistate Bar Examination (MBE) performance in California over the same period; a drop from 1476 to 1423. It is worthwhile noting that the trends observed in California are consistent with those observed nationally over the same period (see Figure 1).

Figure 1

Comparison of California and National Average MBE Performance 2008 through 2016 July Administrations



Much has been written recently about possible causes for these drops. Some have theorized that the test takers themselves have changed. The National Conference of Bar Examiners (NCBE), authors of the MBE, has published several pieces suggesting this and attesting to the continuing psychometric strengths of the exam. They point to the changing landscape of legal education reflected in lowered admission numbers, a decline in the quality of the applicant pool, and shifting attrition and transfer policies. This argument has been somewhat corroborated in statistics reported by the American Bar Association. For entering law school classes of 2005 and 2013¹, the number of law school applications fell 38% (from 95,800 to 59,400), the number of admissions dropped by 19% (from 56,100 to 45,700) and eventual matriculations decreased by 17% (from 45,800 to

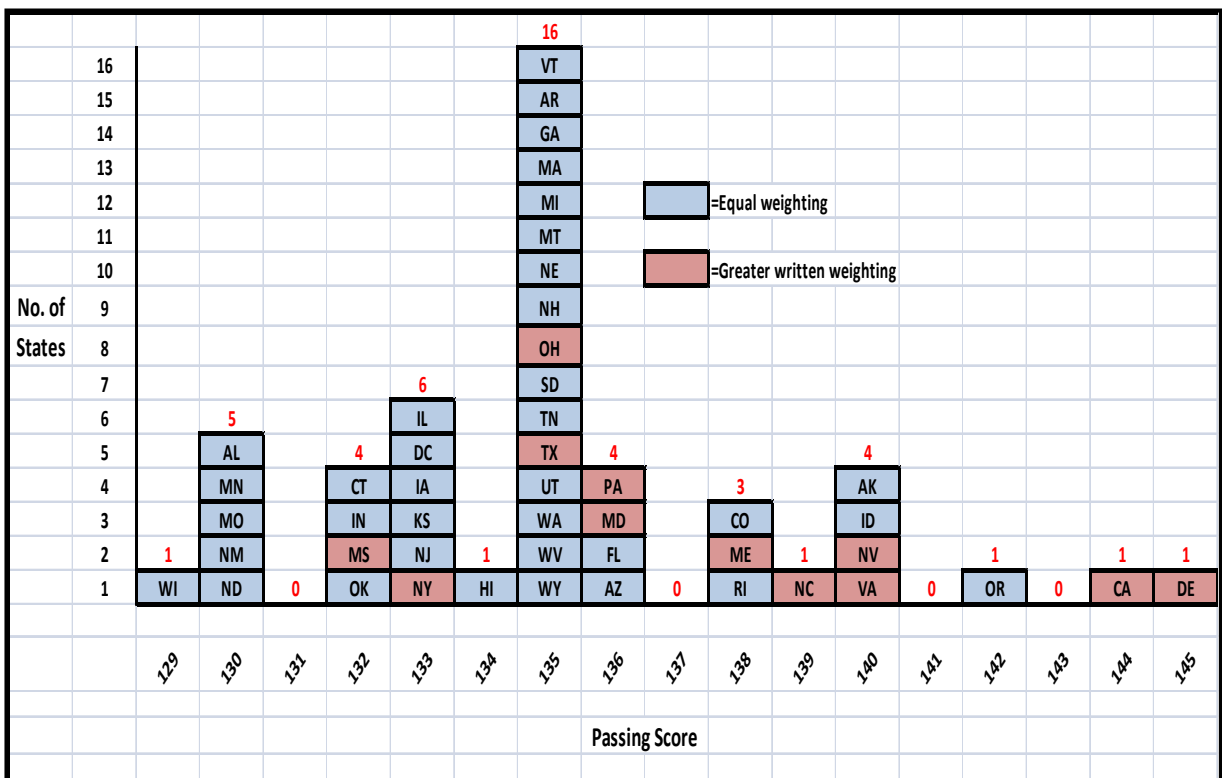
¹ These classes would have made up the majority of first time test takers sitting for the July 2008 and 2016 bar examinations.

37,940) with no corresponding decrease in the number of schools during that period. As a result, a much higher percentage of applicants were admitted to ABA schools in 2013 (75%) than in 2005 (59%).

Law school deans have rebutted these arguments. They have posited that the examination itself has gotten more difficult. The deans have questioned whether it remains an appropriate measure of minimal competency to practice law and whether the content is relevant. They also argue that the standard that is being applied in determining minimal competency to practice in California has been set too high, and should be more in line with other states (see Figure 2). They point to the increased curricular emphasis and instructional time that has been placed on bar preparation skills and legal analysis in recent years. Finally, the deans suggest that the average credentials (LSAT scores and Undergraduate GPA) have generally not declined, and where they have, they are in no way decreasing at the rates that their bar passage has.

Figure 2

**The Passing Scores
States Using the Multistate Bar Examination
(in MBE Units)**



II. PURPOSE OF THIS STUDY

A shift over time in performance on an examination such as the CBE is generally a function of one or more of three possible reasons: (a) the examination itself has changed in some manner, (b) the overall ability or preparedness level of the applicants sitting for the exam has changed, and/or (c) the composition of the test-taking population has been altered. In response to the ongoing public debate and to help untangle the relative impact of these causes, the California Committee of Bar Examiners (The Committee) requested that an initial study be conducted.

This initial study would be limited to analyses of existing, readily available electronic Admissions/Examination Results databases. The purpose of the study would be to (1) establish a statistical baseline to profile the changes that have occurred; and (2) determine whether insights could be provided into factors that might have contributed to the decline. The study would both draw on existing broad statistical summaries and technical reports prepared after each examination, and supplement them with additional, more detailed analyses of the electronic databases that would focus on year-over-year changes.

Thus in summary, the primary objectives of this study were to organize and investigate historical databases for the purpose of establishing a baseline for the changes that have occurred over time, and to investigate any emerging patterns that that could shed light on any or all of the three potential reasons for the decrease in scores and passage rates.

III. METHODS

A. Study Data

The Bar Admissions Office of the State Bar (“Admissions”) maintains a base of information for each applicant who sits for the CBE. In addition to basic demographic information (e.g., gender and race/ethnicity), the applicants’ scores on each section of the examination and final pass/fail disposition are maintained for all applicants. For the current study, we focused on three specific administration years:

- 2008, a period when bar passage rates were at their highest in recent history
- 2016, the most recent period when scores and bar passage rates have been at their lowest since at least 1990
- 2012, a midpoint between the two years when scores were on the decline

We reasoned that if patterns did exist, they would come to light by focusing on the most recent years with the most extreme differences.

Additional factors contributed to the selection of these periods. The CBEs during these years shared the following similarities² in that:

² The configuration and scoring of the CA Bar Examination has changed over the years. We reasoned that it would best to eliminate exams from those periods so as to insure apple-to-apple comparisons.

- They were configured the same (i.e., the MBE, 6 Written Essays, and 2 Performance Tasks (PT))
- They were scored the same (i.e., Each PT was given 2 times the weight of an Essay)
- They were scaled the same (i.e., the Raw Written Score was scaled to the mean and sd of the MBE)
- Total Scale Scores (TSS) were calculated in the same manner (i.e., $.35 \times \text{MBE} + .65 \times \text{Written}$)
- Phase II regrading score bands were the same (i.e., 1390-1439.99)³
- The score required for passing remained the same (i.e., 1440⁴)

For each applicant testing within those years, we extracted the following demographic and performance data⁵:

1. Racial/ethnic status
2. Gender
3. Applicant's law school designation (which includes other non-traditional designations such as foreign trained)
4. Number of examination attempts at the time of administration
5. Attorney applicant status
6. Examination administration (February vs. July)
7. MBE Scale Score
8. Written Scale Score
9. Total Scale Score (TSS)
10. Pass/Fail disposition

Standard reporting of each CBE's general statistics routinely re-categorizes the 300+ law school designations into more homogenous clusters. Previous analyses have found that average examination performance between these clusters varies significantly. Therefore, to facilitate analysis and reporting, we established similar clusters. They included:

- California ABA-Approved Institutions (CA-ABA)
- Non-California ABA-Approved Institutions (NCA-ABA)
- California Accredited Institutions (ACC)
- California Unaccredited Institutions (NAC)
- Foreign Trained (FOR)

Further Classification of CA-ABA Schools. Past research has identified wide diversity in examination performance between students from the various CA-ABA institutions and found that these differences were highly correlated with the Average Law School Admission Test (LSAT) scores at these institutions (see Figure 3). As a result, we reasoned that it would be valuable to further categorize these schools into more homogeneous groups in a search for deviations in patterns of performance.

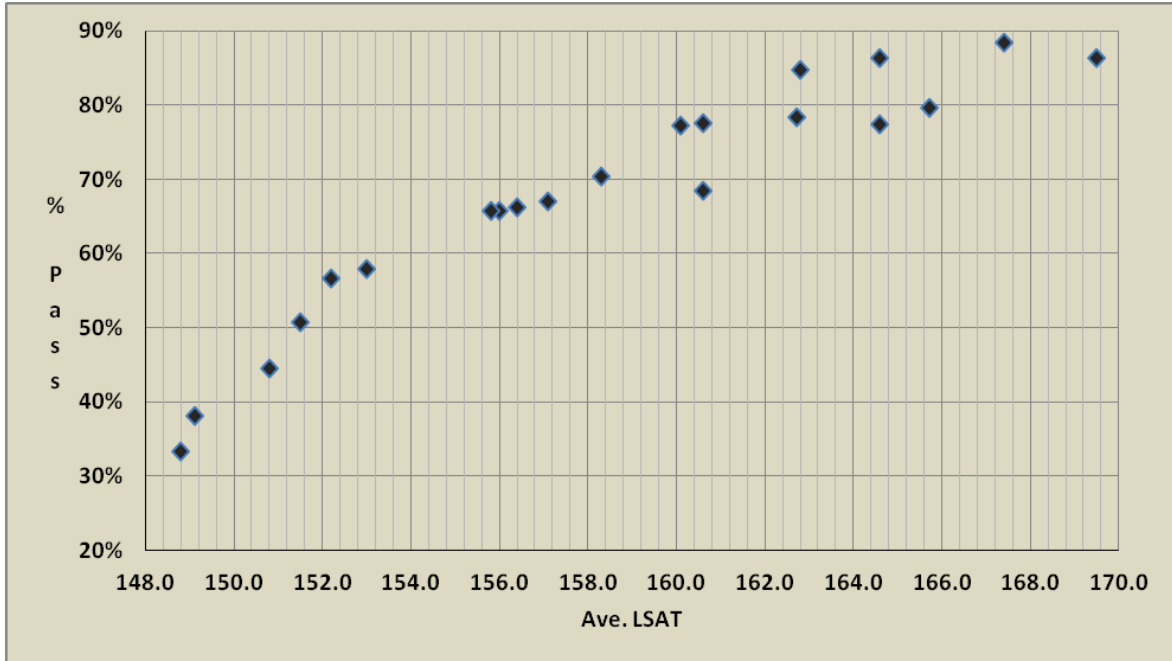
³ Between 2008 and 2012, the Phase III scoring process changed somewhat, but should have no impact on the analyses proposed here given the relatively small number of applicants experiencing this scoring.

⁴ CA multiplies the MBE by a factor of 10. Thus, the 1440 is equivalent to 144 on the original MBE scale.

⁵ Only applicants completing all sections of the CBE were chosen.

Figure 3

**Relationship between Average Law School LSAT and
Bar Passage Rates*
1998-2007**



* Each point on the graph represents the 10 year average LSAT and Passing Rate for students from one school

Since LSAT scores are no longer collected during the application and admissions process, we looked to an outside source⁶ for these data. The website lawschooltransparency.com provided median LSAT scores for each CA-ABA school. Scores were available for 2010 and 2014. We used the 2010 results⁷ since those statistics would most closely reflect the class which took the midpoint examination in the study. We attempted to establish roughly equal number of law schools in each group and find a break point in the Median LSAT for the grouping. Our analysis resulted in the following groups:

- Level I - 7 schools; Median LSAT Range (150-155)
- Level II - 6 schools; Median LSAT Range (158-161)
- Level III - 8 schools; Median LSAT Range (163-170)

⁶ The last year that individual applicant LSAT scores were collected during the admissions process was 2007

⁷ The correlation between 2010 and 2014 LSATs was .96 suggesting little change in the relative standings of the schools over time

B. Research Questions

Given the available data, this study sought to address five (5) major research questions.

1. *How has the composition of the test-taking population changed over time?*

- a) How has the absolute number of test takers differed?
- b) What changes have occurred in the relative “mix” of test-takers, i.e., do certain historically lower performing groups now make up a higher proportion of the test-taking population?

As the number of applications to law schools have decreased, it is possible that characteristics of students (measurable or otherwise) have changed over time. Historically, selected applicants from certain subgroups have performed more poorly on the bar examination and passed at a lower rate than others (e.g., NAC vs CA-ABA schools). If the test taking population as a whole is more “saturated” with these lower performing groups, it might be one cause for decreasing scores.

2. *To what degree have examination scores & final pass/fail disposition changed over time?*

- a) Has the magnitude of the changes been consistent across sections of the examination?
- b) Have each of the relevant sub-groups experienced similar changes, or have some groups experienced greater changes than others?

The simple change in the overall passage rate is a gross statistic. Knowing if specific groups of applicants experienced larger or smaller decreases in performance is essential to a gaining an understanding of the change. Additionally, pass/fail disposition is based upon actual examination scores; a closer examination of the size of differences is essential.

3. *To what degree has the shape of the distribution of scores changed, i.e. while the mean scores have changed, have other attributes (e.g., the median, relevant quartiles, etc) shifted as well?*

At this point, it is unclear whether the change in scores leading to the decreasing passage rate is consistent throughout the score distributions, or more heavily concentrated in one or more locations (e.g., close to the passing standard). It is reasonable to determine what size of improvement in performance on recent examinations would have led to increased passage rates.

4. *Has the likelihood of eventually passing (e.g., after 2 years) changed over time?*

- a) Are individual examinees who must repeat the exam more or less likely to pass upon retaking the exam?
- b) Has perseverance of failing examinees remained consistent?
- c) What do these patterns look like by relevant sub-groups, and how have they changed?

Preliminary evidence suggests that the recent passing rates have not dropped as rapidly for repeating applicants (those taking the exam for a 2nd, 3rd, or more time) as in the past. This may imply that an “eventual” bar passage rate may not have changed as drastically as the first time rate. What we may be seeing is that recent applicants are taking longer to pass. If this were the case, it may point to possible changes in applicants’ bar preparation that have occurred since 2008.

Analyses of the success of test repeaters require that a given applicant be tracked over time, i.e., longitudinally. To compile longitudinal data for the purposes of this study, we first obtained data for the cohort of students who took the exam for the first time in July 2008, and followed them forward through February 2010, a total of four examinations. For a second cohort who had taken the exam more recently, we selected students who first sat for the CBE in July 2014 (when the passing rate first dipped below 50%) and followed them forward through February 2016, an additional four examinations.

5. Have other statistical/psychometric properties of the examination changed over time in such a way to impact applicant scores?

- a) Has the reliability of the overall examination or its individual sections changed?
- b) Has the nature of the relationship of the sections changed? For example, if historically applicants performed similarly on specific sections of the exam, either doing well or poorly on both sections, has that pattern persisted?

The amount of measurement error that exists in applicant scores is a function of the reliability of the respective sections (i.e., written and MBE) and the degree of relationship between them. Reliability is a measure of the degree of stability or consistency of scores on a test and is one of key indicators of a test’s psychometric properties.⁸ The lower the reliability, the higher the amount of error that exists in the measurement. Overall reliability on the CBE itself is a function of the separate reliabilities of the Written section, the MBE and the degree of correlation between the two. As any of these three values change, so does the reliability.

6. How would bar passage rates change if the cut point were set at a standard used by other states?

- a) What would the passage rates have been if a different passing score had been established?
- b) Would the decline in passage rates during the study timeframe been as pronounced under such a circumstance?
- c) Would any relevant sub-group have seen larger increases or decreases than others?

The California standard (i.e., 1440) for passing the CBE did not change over the 9 year time frame of our analyses. As previously discussed, this standard is the second highest in the country, and questions have been raised as to whether bar passage rates would have declined as steeply if the standard was lower. An additional related question was

⁸ Validity is another major psychometric property of a test. Data available to this study precludes an evaluation of any changes that may have occurred since 2008 in any of the various measures of validity that are used.

how the decreases in passing rates under an alternative standard would compare to that of a similarly situated state (i.e., one of comparable size, applicant composition and passing standard).

IV. RESULTS

This section discusses the data analyses and outcomes relevant to each of the study research questions identified above. For the most part, we present findings for both July and February administrations. For some analyses we present results for July only since applicants sitting for this administration generally are more representative of the typical recent law school graduate. All calculated statistics are presented in the tables but only key findings (e.g., significant differences between CBE years or subgroups) are discussed in the text.

1. How has the composition of the test-taking population changed over time?

Figures 4 and 5 illustrate the trend in applicants sitting for the July and February CBE since 1990.

Figure 4

Number of Examinees Taking July CBEs
1990 through 2016

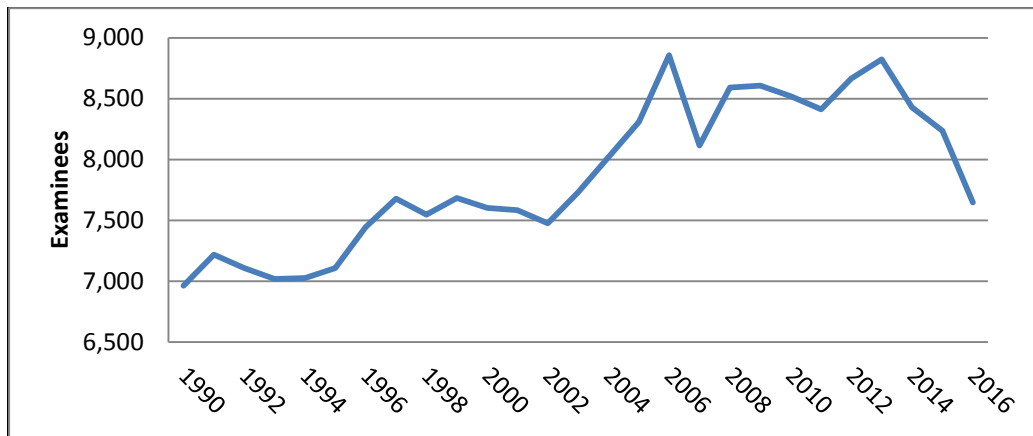


Figure 4 depicts the gradual rise in July examinees peaking in 2006 and again in 2013, and beginning a sharp drop in 2014. The February counts (Figure 5) have tended to track with those of the July examinations, though the downward trend seen in the July counts during the past two has been countered by an upward trend in the number of February test takers. This uptick may be a function of more applicants repeating the examination.

Figure 5

**Number of Examinees Taking February CBEs
1990 through 2016**

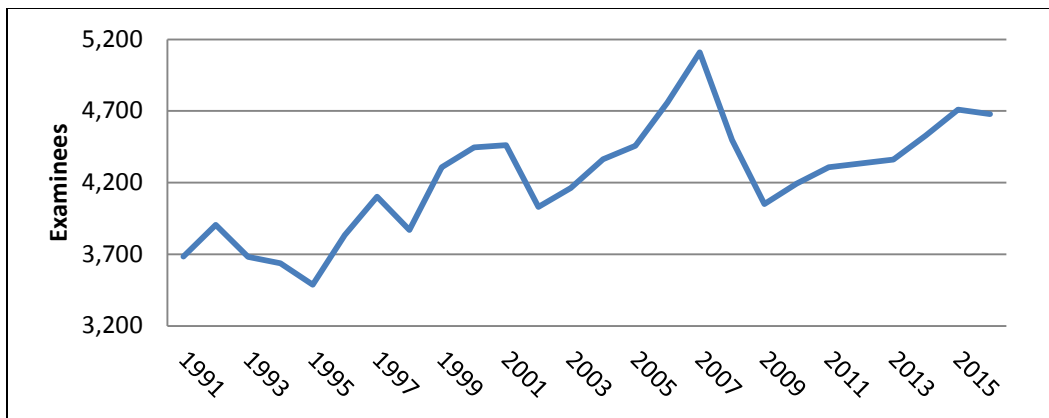


Table 1 provides the characteristics of applicants sitting for examinations in each of the three years included in our study time frame (2008, 2012 and 2016). Since the populations of test-takers for the July and February bar administrations have traditionally varied in terms of size and composition, we examined differences within each administration separately. These point-in-time snapshots show small, but interesting variances in the composition of the applicant populations in each year.

For the July CBE, we note that:

- In comparison to 2008, there were 11% fewer applicants in 2016. This is the largest change during any 8-year testing period since 1990.
- In comparison to 2008, the 2016 population of test-takers included a slightly higher proportion of minority applicants, notably Hispanics (5%) and a corresponding lower proportion of White applicants (6%)⁹. As discussed later, minority applicants have tended to have lower scores and passage rates than Whites.
- There were 5% fewer first time takers in 2016 than in 2008 (72% compared to 67%), and a corresponding 5% increase in the proportion of test repeaters. First time applicants traditionally have performed higher than those repeating the CBE.

⁹ A small number of applicants do not report their race/ethnicity or report as some other group. The percentages are based only on applicants in the four major groups.

Table 1

Composition of the CBE Applicant Pool in 2008, 2012, 2016
July and February Administrations

Metric	July CBE				February CBE			
	Year			Change	Year			Change
	2008	2012	2016	2008-2016	2008	2012	2016	2008-2016
Examinees	8,590	8,664	7,648	-11%	4,497	4,334	4,678	4%
School								
CA ABA	53%	55%	53%	0%	40%	39%	38%	-2%
Level I	29%	28%	31%	2%	50%	47%	48%	-2%
Level II	36%	35%	31%	-5%	30%	34%	30%	0%
Level III	34%	35%	37%	3%	18%	18%	21%	3%
Non CA ABA	22%	20%	18%	-4%	17%	18%	17%	0%
CA Accredited	9%	7%	10%	1%	13%	12%	14%	1%
CA Non-Accredited	3%	2%	2%	-1%	7%	6%	4%	-3%
Foreign	3%	3%	5%	2%	5%	6%	7%	2%
Exams Taken								
1st	72%	74%	67%	-5%	33%	33%	29%	-4%
2nd	7%	7%	9%	2%	33%	33%	38%	5%
3rd	7%	6%	10%	3%	8%	9%	10%	2%
> 3rd	12%	11%	13%	1%	24%	23%	22%	-2%
Racial/Ethnic								
Asian	18%	18%	20%	2%	18%	19%	21%	3%
Hispanic	9%	10%	14%	5%	11%	12%	14%	3%
Black	5%	5%	6%	1%	8%	7%	7%	-1%
White	57%	56%	51%	-6%	52%	51%	49%	-3%
Gender								
Male	52%	53%	48%	-4%	54%	51%	50%	-4%
Attorney	9%	9%	11%	2%	17%	17%	19%	2%

* Multi-group categories may not add to 100% due to missing information or small numbers in an "other" group

- 53% of applicants graduated from CA-ABA schools in 2008 and this did not change in 2016. However, there were 4% fewer students coming from NCA-ABA schools (22% versus 18%). Foreign trained applicants, a traditionally low performing group, increased slightly from 3% to 5%.

- By 2016 males no longer made up the majority of examinees (48% vs 52% females). Given the historical similarities in scores between the gender groups, this change would be estimated to have minimal impact.

With respect to the February administrations, we observed:

- The number of applicants for the February 2016 administration was 4% greater than the number in 2008 (4,678 versus 4,497) but the relative percentage of first time takers was reduced by 4% (from 33% to 29%). This could suggest that the recent decrease in the July passage rates may be “feeding” additional applicants into the February administrations.¹⁰
- Similar to the July examinations, the proportion of Asian and Hispanic examinees was higher in 2016 than 9 years earlier while the percentage of Whites was 3% lower.
- The proportion of students from Level III (high LSAT) schools was 3% greater in 2016 than in 2008.
- The proportion of attorney applicants in the February exam was higher than in the July exam in both 2008 and 2016, and for both administrations in both years the proportion of attorneys sitting for the bar was 2% greater.

Table 1 shows that the proportion of applicant groups that have historically scored lower on the CBE was somewhat greater in 2016 than in 2008. A full evaluation of any relationship between these changes in the composition of the applicant population and a reduction in scores requires addressing the remaining research questions.

2. To what degree have examination scores & final pass/fail disposition changed over time?

Total Population. Table 2 presents information on the average performance on each section of the exam and the total scores (expressed in scale score points), along with the percentage passing the examination in the three years under study. Data is presented for both the July and February CBE.

Inspection of the table reveals that while the absolute change in the MBE and Written sections of the examination have differed, the percentage decreases in scores are equal (4% for July and 1% in February). *This result indicates that across all applicants, no one section of the examination is contributing to the decrease in passing rates more than another.*

¹⁰ The “tracking/persistence” portion of the analyses presented later will shed more light on this issue

Table 2

Average CBE Performance & Bar Passage Rates By Administration

<u>Year</u>	<u>July</u>					<u>February</u>				
	<u>N</u>	<u>Ave. MBE</u>	<u>Ave. Written</u>	<u>Ave. Total</u>	<u>% Pass</u>	<u>N</u>	<u>Ave. MBE</u>	<u>Ave. Written</u>	<u>Ave. Total</u>	<u>% Pass</u>
2008	8,590	1476	1481	1479	62%	4,497	1405	1400	1402	40%
2012	8,664	1460	1456	1457	56%	4,334	1407	1407	1407	43%
2016	7,648	1423	1415	1418	44%	4,678	1388	1387	1387	36%
<u>2008-2016</u>										
Diff.	-942	-53	-66	-61	-18%	181	-17	-13	-15	-4%
% Change	-11%	-4%	-4%	-4%	-29%	4%	-1%	-1%	-1%	-10.0%

It further suggests that whatever the different skills being measured on the respective parts of the test, all have decreased at a similar pace. Overall, the average Total Scale Score (TSS) has dropped 61 scale score points in July (from 1479 to 1418) and 13 points in February (from 1400 to 1387). By way of reference, in 2016, the average score actually fell below the passing standard of 1440.¹¹ In terms of standard deviation (Sd) units, this represents slightly less than a ½ Sd change in July and a 10% Sd change in February.

The TSS drop was accompanied by a corresponding decrease in passing rates for the July exams; there was a steady decline in these rates from 62% to 56% to 44% in 2008, 2012 and 2016, respectively. The change in passing rates in February, however, rose between 2008 and 2012 (from 40% to 43%), followed by drop to 36% in 2016.

We next examine whether different segments of the applicant pool experienced differing degrees of change from 2008 to 2016. Given the substantial difference between July and February administrations, we present findings for the July examinations. Where findings are significantly different for February administration, we point these out.

Repeater Status. Table 3 presents similar data to Table 2, stratified by whether applicants were sitting for the first time (“first timers”), or repeating the examination (“repeaters”). As known from historical results, first timers perform consistently higher than repeaters and that fact is illustrated in Table 2. The gap in TSS between the two groups in 2008 was 150 scale score points (a full Sd.); however, that gap decreased on average to 137 points by 2016.

¹¹ This situation recently began in 2013 when the mean score fell to 1436 and has occurred in three other administrations since 1990.

Table 3

**Average CBE Performance & Bar Passage Rates By Repeater Status
July Administration**

	<u>1st Time Taker</u>				<u>Repeater</u>			
	<u>Ave. MBE</u>	<u>Ave. Written</u>	<u>Ave. Total</u>	<u>% Pass</u>	<u>Ave. MBE</u>	<u>Ave. Written</u>	<u>Ave. Total</u>	<u>% Pass</u>
2008	1515	1523	1520	75%	1373	1368	1370	28%
2012	1493	1495	1494	69%	1365	1340	1349	18%
2016	1458	1461	1460	57%	1353	1323	1333	17%
<u>2008-2016</u>								
Diff.	-57	-62	-60	-18%	-20	-45	-37	-11%
% Change	-4%	-4%	-4%	-24%	-1%	-3%	-3%	-39%

First timers experienced similar rates of decrease in their MBE and Written scores, while repeaters' MBE scores dropped by 1% as compared to a 3% drop in their Written scores. The absolute decrease in passing rates for first timers between 2008 and 2016 (18%) followed the pattern for the entire test taking pool, while the absolute decrease for repeaters was almost half that amount (11%). Additionally, for repeaters the sharpest decrease was seen in 2012 (18%; a drop of 10% from 2008). The change from 2012 to 2016 was only 1% as compared to the 8% decrease for first timers. This pattern tends to suggest that the recent applicants repeating the examination may have been qualitatively different than their predecessors.

Law School. Table 4 presents change in scores and passing rates stratified by the type of school that the applicant attended. Historically, average scores and passing rates have been highest among the CA-ABA and NCA-ABA schools. Scores and passing rates for ACC and NAC have been much lower. For example, in 2008 the passing rate at CA-ABA schools was 74% as compared to 21% at NAC schools (a net difference of over 50%). Yet, in terms of score changes and decreases in passage rates over the study time frame, students from CA-ABA schools had the largest absolute changes in scores and bar passage rates.

Table 4

Average CBE Performance & Bar Passage Rates by Type of Law School Attended
July Administration

Year	CA ABA				Non CA ABA				CA Accredited				CA Unaccredited			
	Ave. MBE	Ave. Written	Ave. Total	% Pass	Ave. MBE	Ave. Written	Ave. Total	% Pass	Ave. MBE	Ave. Written	Ave. Total	% Pass	Ave. MBE	Ave. Written	Ave. Total	% Pass
2008	1510	1525	1519	74%	1497	1494	1495	66%	1355	1367	1363	26%	1375	1341	1353	21%
2012	1491	1503	1499	69%	1476	1452	1461	55%	1350	1347	1348	19%	1369	1313	1332	13%
2016	1457	1460	1459	54%	1448	1434	1439	48%	1329	1312	1318	13%	1350	1280	1304	14%
2008-2016																
Diff.	-53	-65	-60	-20%	-49	-60	-56	-18%	-26	-55	-45	-13%	-25	-61	-49	-7%
% Change	-4%	-4%	-4%	-27%	-3%	-4%	-4%	-27%	-2%	-4%	-3%	-50%	-2%	-5%	-4%	-33%

Average scores by section dropped equally (roughly 4%) in both in and out-of-state ABA schools, while students from the ACC and NAC experienced greater drops in their Written sections (4% and 5% respectively) than on the MBE (2%). Correspondingly, the absolute drop in bar passage rates was greater for students from the ABA schools (20% and 18%) than in the non-ABA schools (13% for ACC and 7% for NAC). As shown at the bottom of Table 4, the *absolute drop* in the passing rate is quite different from the *percentage change* in the passing rate. For example, while the passing rates for students in ACC schools dropped by only 13%, that drop represented a 50% decrease from the 26% level in 2008.

When we look more deeply into the changes in performance of students from CA-ABA schools, some interesting trends begin to emerge. Table 5 provides data on the performance of applicants from schools based upon the median LSAT for students at those schools. Both average section scores and passing rates for the Level III schools (i.e., those with the highest median LSAT scores) were the highest of the three school groups in 2008 and remained that way in 2016. Students from Level III schools also showed the smallest decrease in passage rates at 11%, and the smallest and most consistent changes in examination section scores (3%) and overall TSS. For applicants from schools with lower median LSAT scores (Levels II and I), the decrease in performance between 2008 and 2016 is much greater.

Table 5

Average CBE Performance & Bar Passage Rates by CA ABA Law School Level
July Administration

Year	Level I LSAT Schools				Level II LSAT School				Level III LSAT Schools			
	Ave. MBE	Ave. Written	Ave. Total	% Pass	Ave. MBE	Ave. Written	Ave. Total	% Pass	Ave. MBE	Ave. Written	Ave. Total	% Pass
2008	1455	1476	1468	61%	1513	1529	1523	77%	1553	1562	1559	83%
2012	1439	1460	1453	55%	1480	1497	1491	69%	1542	1543	1543	81%
2016	1389	1390	1389	32%	1462	1458	1460	56%	1509	1519	1516	72%
2008-2016												
Difference	-66	-86	-79	-29%	-51	-71	-63	-21%	-44	-43	-43	-11%
% Change	-5%	-6%	-5%	-48%	-3%	-5%	-4%	-27%	-3%	-3%	-3%	-13%

While not all students in the various law school groupings share an identical LSAT score, their LSAT does tend to be more similar to those in their own school group than students attending schools from other Levels. Although there have been decreases in CBE performance in all Levels in recent years, the fact that the changes are more pronounced in the Levels I and II schools may suggest that the quality (and possible ability level) of students from those schools have changed at a more rapid pace than students from the Level III schools.

Racial/Ethnic Group. Table 6 presents similar statistics for the July examinations stratified by racial/ethnic group. Historically, White students have made up the majority of students sitting for the CBE and have had the highest scores and bar passage rates. When we look at how CBE performance has changed by racial/ethnic group over the study time frame, we see that Whites have tended to behave similarly to the various minority groups. Mean Written scores have dropped by 4% between 2008 and 2016, which is exactly the pattern seen in Blacks and Hispanics. Scores for Asians, a group whose ranks have proportionately increased since 2008, dropped by 1% more. Across all ethnic groups, TSS have decreased by either 3% or 4%, and the decrease in bar passage rates differ by only have 5% between the groups (18% in Asians, 17% for Whites, 15% for Hispanics and 13% for Blacks). The largest relative decrease in passage rates was experienced by Blacks where their change from 34% in 2008 to 21% in 2016 represents an overall 38% decrease (compared to 32%, 31% and 24% for Asians, Hispanics and Whites, respectively).

Table 6

Average CBE Performance & Bar Passage Rates by Racial/Ethnic Group
July Administration

Year	Asian				Hispanic				Black				White			
	Ave. MBE	Ave. Written	Ave. Total	% Pass	Ave. MBE	Ave. Written	Ave. Total	% Pass	Ave. MBE	Ave. Written	Ave. Total	% Pass	Ave. MBE	Ave. Written	Ave. Total	% Pass
2008	1447	1462	1457	56%	1427	1437	1433	49%	1389	1382	1384	34%	1504	1505	1504	69%
2012	1431	1443	1439	51%	1411	1414	1413	42%	1380	1362	1370	28%	1491	1480	1484	64%
2016	1383	1396	1392	38%	1388	1381	1383	34%	1361	1327	1339	21%	1459	1445	1450	52%
2008-2016																
Difference	-64	-66	-65	-18%	-39	-56	-50	-15%	-28	-55	-45	-13%	-45	-60	-54	-17%
% Change	-4%	-5%	-4%	-32%	-3%	-4%	-3%	-31%	-2%	-4%	-3%	-38%	-3%	-4%	-4%	-25%

Gender. Finally, Table 7 presents performance statistics by gender. Both CBE scale scores and bar passage rates have historically been fairly equal. In 2008 there was only a 9 point difference between males and females and 2% difference in passage rates (females higher in both cases)¹². In 2012, performance was identical for males and females, while in 2016, the female passing rate was 1% lower for females than male examinees (43% vs 44%). This slight shift is evidenced in the 2008 to 2016 % Change data showing a net decrease in pass rates of 20% for females and 17% in males.

¹² A pattern has existed for many years whereby female test takers score more highly on the Written section of the CBE while the reverse is true for the MBE. Interestingly the gap has widened on the MBE while narrowing slightly on the Written section.

Table 7
Average CBE Performance & Bar Passage Rates by Gender
July Administration

<u>Year</u>	<u>Females</u>				<u>Males</u>			
	<u>Ave. MBE</u>	<u>Ave. Written</u>	<u>Ave. Total</u>	<u>% Pass</u>	<u>Ave. MBE</u>	<u>Ave. Written</u>	<u>Ave. Total</u>	<u>% Pass</u>
2008	1462	1496	1484	63%	1489	1467	1475	61%
2012	1439	1467	1457	56%	1479	1446	1458	56%
2016	1403	1421	1415	43%	1443	1409	1421	44%
<u>2008-2016</u>								
Difference	-59	-75	-69	-20%	-46	-58	-54	-17%
% Change	-4%	-5%	-5%	-32%	-3%	-4%	-4%	-28%

“Multi-Characteristic” Estimation Model. The preceding tables have shown some changes in the composition of the CBE applicant population over the study period (Table 1), along with changes in CBE performance by individual characteristics of applicants including repeater status, type of law school, race/ethnicity and gender (Tables 3-7). An applicant however is some combination of these individual attributes. For example, they may be a Hispanic female coming from a Level III ABA school who repeated the exam for the second time, or a White male who graduated from an accredited law school making their first attempt. Additionally, the combination of characteristics represented by applicants in each year’s test-taking population varies over time.

To estimate the impact that the change in applicant mixes from 2008 to 2012 and 2016 may have had on performance in the latter two years, we developed an estimation model. In the model we calculated the bar passage rates and average TSS in 2008 for all combinations of number of exams taken (first time vs. repeater), law school type (including the separate CA-ABA Levels), racial/ethnic group, and gender. We then applied those statistics to the applicants in the same groups in 2012 and 2016, re-weighted them based upon the applicant counts in the respective groups, and recalculated (i.e., estimated) the overall mean TSS and bar passage rates. The results are summarized in Table 8.

Results from Table 8 shows that the changed composition of examinees would have led to reduced performance in both 2012 and 2016, all other things held equal. For the July administration in 2016, the TSS would have been expected to drop by 12 points (1479 – 1467) and the passing rate expected to drop by 3% (62% - 59%). The actual decreases for both measures were much greater, however: a 60 point decrease in the TSS and an 18% decline in the passing rate. *The results suggest that for the July administration only 20% of the change in TSS (12/60) and 17% of the change in passage rates were due to the shift in applicant mix.*

Table 8

Projected vs. Actual CBE Performance

<u>Year</u>	<u>Average Total Score</u>		<u>% Passing</u>	
	<u>Projected</u>	<u>Actual</u>	<u>Projected</u>	<u>Actual</u>
July 2008		1479		62%
2012	1483	1457	64%	56%
2016	1467	1419	59%	44%
<u>2008-2016 Difference</u>	-12	-60	-3%	-18%
February 2008		1402		40%
2012	1402	1407	40%	43%
2016	1399	1387	40%	36%
<u>2008-2016 Difference</u>	-3	-15	0%	-4%

In February, performance would have been estimated to have dropped slightly as well, but not to the same degree as July. For example, the 2016 pass rate would have been estimated to remain exactly the same as in 2008 (as compared to an actual drop of 4%), while Average TSS would have been estimated to have changed by only 3 points (20% of the actual change). *These findings strongly suggest that there are other, unmeasured characteristics in the population of test takers and/or the testing that has led to the observed declines in passage rates between 2008 and 2016.*

3. How has the distribution of scores changed, i.e. while the mean scores have changed, have other attributes (e.g., the median, relevant quartiles, etc) changed as well?

Often the focus on a simple measure of central tendency (e.g., a mean) masks other interesting information in large samples such as that for the thousands of applicants sitting for the CBE. While the previous tables showed that the average scores have trended downwards from 2008 to 2016, they don't indicate where the changes have occurred in the distribution, nor how. For example, average scores by themselves will not indicate whether large amounts of applicants have scored just below the passing standard of 1440, while a second large cluster of test-takers with much lower scores led to an observed decline in the "average" test score.

We explore differences in the score distributions for 2008 and 2016 below. Since the previous data has suggested that more significant changes have occurred in the July administrations, results in this section are reported for those examinations only.

Distribution Similarities and Differences. Table 9 reports the TSS scores associated with various percentiles within the distributions of the 2008 and 2016 examinations. A percentile is defined as the percentage of observations (i.e., applicants) scoring at or below the given score. Table 9 presents data on 5 key percentile points: the three “quartiles” which are the 25th percentile, the 50th percentile (i.e. the median or midpoint), and the 75th percentile; the 10th percentile which is located at the bottom of the distribution and the 90th percentile, which is located at the top of the distribution. In addition to the TSS, we report this data for both the Written and MBE sections.

As can be seen in Table 9 the scores associated with each percentile point for each scale score are lower in 2016 than 2008, though the sizes of the differences are not consistent across the percentile points or by examination section. For example, with respect to the MBE, we see that the bottom 10% of the 2008 applicant pool scored a 1267 or higher as compared to the bottom 10% in 2016 scoring only 1197; a 70 point difference (almost $\frac{1}{2}$ Sd). It can also be seen that as one moves up the distribution, the sizes of the difference begin to get smaller (the 90th percentile in 2008 was 1673 compared to 1631 in 2016, a difference of only 42 points). This finding suggests that, in comparison to 2008, a greater proportion of the lower performing students (on the MBE) in 2016 clustered at the bottom of the distribution for that year. The pattern is slightly changed on the Written section where differences appear to be more consistent in the middle $\frac{3}{4}$'s of the distribution and slightly smaller at the tails.

Table 9 also reports the size of the standard deviation or the measure of score spread. On average, performance scores have a greater spread in 2016 on both sections and overall. The cause of this additional score spread cannot be determined from the available data, but it does suggest potentially greater variation in the applicant pool.

Table 9

**Total Scale Scores at Various Percentile Points
on the 2008 and 2016 CBEs
July Administrations**

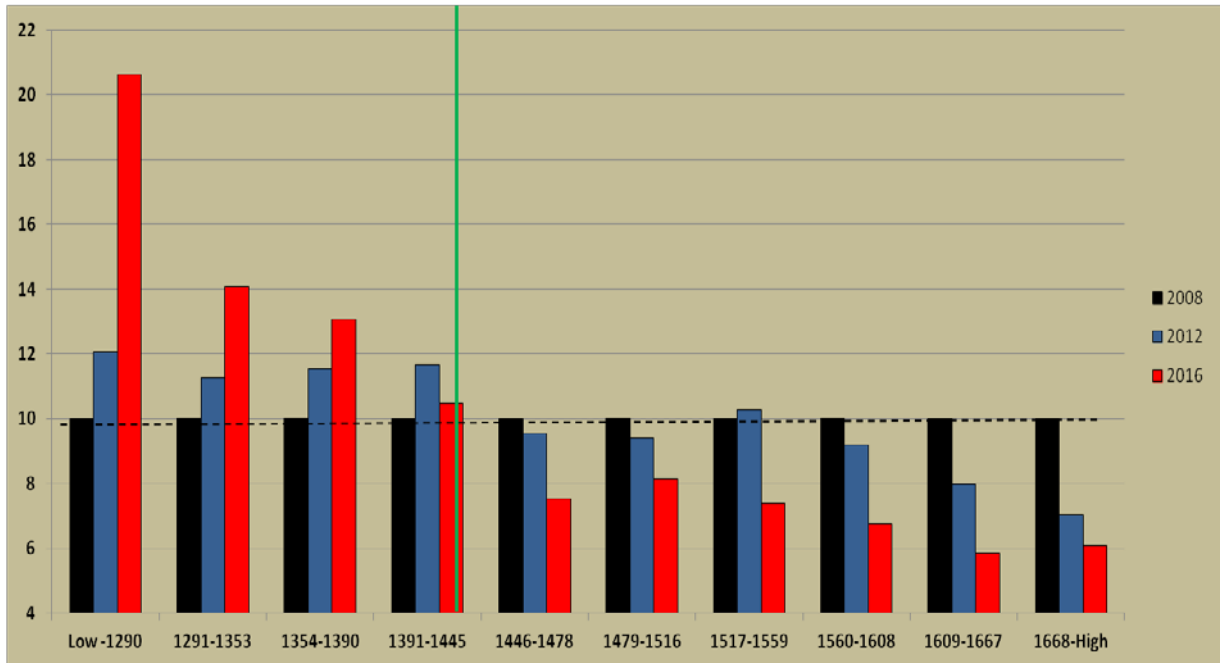
Distribution Points	MBE Score			Written Score			Total Score		
	2008	2016	Diff	2008	2016	Diff	2008	2016	Diff
10th Pctl	1267	1197	-70	1282	1220	-62	1292	1227	-65
1st Quartile	1375	1315	-60	1364	1290	-74	1374	1313	-61
Median	1487	1437	-50	1473	1394	-79	1478	1402	-76
3rd Quartile	1593	1543	-50	1595	1516	-79	1582	1522	-60
90th Pctl	1673	1631	-42	1689	1638	-51	1667	1627	-40
Std Dev	155	167	12	158	165	7	145	155	10

“Exploring the Tail”. The increase in score spread and the size of the difference at the 10th percentile of the MBE (an equated measure and the more reliable of the two sections) between 2008 and 2016, led to further exploration of possible explanations for the observed differences between the two periods.

To make a direct comparison we first established the deciles (percentile points marking 10% segments) of the 2008 TSS score distribution. We then used those same score points to categorize the 2012 and 2016 test takers. We calculated the relative percentages of the test takers falling into each of the categories and compared them to each of the 10% segments to determine where the largest differences were. Figure 5 illustrates the results.

Figure 5

Percentage of Applicants with Total Scale Scores
Within Selected Ranges
July Administrations



* The green line represents the passing score

As shown, over 21% of the 2016 test population is in the bottom decile of the 2008 TSS distribution (i.e., scores ≤ 1290). The percentage rapidly decreases in the 2nd (1291-1353; 14%), 3rd (1354-1390; 13%) and 4th (1391-1445) deciles. In 2012, as scores were in the middle of their current decline, the percentages of the applicants in all four of these lower deciles were much more similar (ranging between 11% and 12%). Further, none of the other score ranges showed such wide differences between 2008, 2012 and 2016 as this lowest score range.

This finding leads to the question as to whether the composition of test takers at this lowest score level (i.e., ≤ 1290 and over 150 points from the passing standard) has systematically changed since 2016. To examine this question, we calculated the percentages of the applicants from various subgroups who fell into this group in 2016 and compared them to the percentages from the 2008 examination. Results are summarized in Table 10.

The entries in Table 10 represent the percentage of total test takers in the identified group that scored less than or equal to 1290. For example, in 2008, 6% of all students from CA-ABA schools had scores less than 1290 as compared 14% of all students from CA-ABA schools testing in 2016. The final column in the table presents the absolute differences in those percentages between the two years. In terms of total numbers, the 21% of total 2016 test takers in the lowest score band translates to almost 1,600 test takers.

Table 10

**Percentage of Applicants in Various Subgroups with
Total Scale Scores <= 1290
July Administrations**

<u>Subgroup</u>	<u>Year</u>			<u>2008- 2016</u>
	<u>2008</u>	<u>2012</u>	<u>2016</u>	
<u>Examinees</u>	N=858	N=1,045	N=1,578	
<u>School</u>				
<u>CA ABA</u>	6%	8%	14%	8%
Level I	7%	8%	18%	11%
Level II	3%	4%	9%	6%
Level III	2%	2%	7%	5%
<u>Non CA ABA</u>	8%	12%	18%	10%
CA Accredited	27%	32%	41%	14%
CA Non-Accredited	26%	35%	47%	21%
Foreign	42%	44%	57%	15%
<u>Exams Taken</u>				
1st	6%	8%	14%	8%
2nd	20%	24%	36%	16%
3rd	17%	18%	25%	8%
> 3rd	25%	31%	37%	12%
<u>Racial/Ethnic</u>				
Asian	11%	15%	27%	16%
Hispanic	16%	17%	24%	8%
Black	25%	26%	36%	11%
White	7%	9%	15%	8%
<u>Gender</u>				
Male	10%	12%	19%	9%
Female	10%	12%	21%	11%

These data shed additional light on changes in the composition of the test taking populations during the study period. In terms of the examinees' law schools, the relative percentage of students from CA-ABA in the lowest decile of the score range more than doubled from 6% in 2008 to 14% in 2016. Furthermore, it was the students from the Level I CA-ABA schools (lowest median LSAT) that accounted for the largest absolute change (11%). Statistics for NCA-ABA applicants mirrored those of the Level I CA-ABA applicants. Nearly 2 out of 5, and 1 out of 2 applicants from ACC and NAC schools scored in this lowest score range in 2016, compared to only 25% in 2008.

In terms of the impact of testing status, the percentage of 1st time takers in the lowest decile increased by 8% (more than doubling the rate) between 2008 and 2016. However, CBE first & third- time repeaters experienced the largest absolute increases , with about 1/3 of the 2016 applicants falling into the lowest score range.

The percentage of each racial/ethnic group falling into the ≤ 1290 range increased in 2016. By far, the largest change occurred among Asian students; roughly 10% had scored in the lowest decile in 2008, but almost three-times as many (27% or an absolute increase of 16%) did so in 2016. As a group, Blacks continued to have the largest proportion of applicants (36%) in the lowest score range while the relative increase was not as great as for Asians.

While the percentage of both males and females scoring in this group increased (doubling the percentage in 2008), the changes were roughly equivalent.

Results in this section lend evidence to the fact that decreases in CBE scores are not equivalent across the lower portions of the score distribution, and that the overall lower mean scores (and subsequent lower passage rates) may rather be a function of a large group of applicants sitting for the examination who are much less prepared, relative to applicants who took the CBE 9 years prior. The disproportionate increase in the percentage of applicants from selected subgroups (e.g., Level I ABA schools) who scored at these lower levels suggests that the 2016 applicant population may be substantively different (e.g., lower ability?) than those taking the 2008 exam.

4. Has the likelihood of eventually passing after 2 years changed over time?

The revised ABA accreditation process has proposed a standard requiring that 75% of a law school's graduating class pass the CBE within two years. Based on this standard and the fact that decreases in performance on the February exams (taken by disproportionately more repeaters), were not as great as in July examinations, we analyzed the available data to determine if the *changes* in the "two year" pass rates were as significant as the annual rate.

Our analyses tracked two cohorts of first time July CBE takers, one from 2008 and the other from 2014¹³. There were 6,235 and 6,185 first time applicants taking the July 2008 and 2014 CBE, respectively. Table 11 presents data on the outcomes for these two cohorts beginning with their initial attempt and 3 subsequent opportunities.

¹³ The overall passing rate in 2014 was 49%, the first July examination that the rate dipped below 50% since the early 2000's.

Table 11

**Bar Passage Rates after 2 Years
July 2008 vs. July 2014 First Time Test Takers**

	<u>% Pass on 1st Attempt</u>	<u>% Pass on Subsequent Attempt</u>	<u>% Pass Total</u>	<u>% Failing</u>	<u>% No Subsequent Attempts</u>
2008	75%	11%	86%	8%	5%
2014	61%	19%	80%	12%	8%
<u>2008-2014 Diff.</u>	-14%	8%	-6%	4%	3%

Overall Eventual Pass Rates. Table 11 shows that for the 2008 cohort, 86% of the test takers passed the CBE within the 4 exam window; 75% on their initial attempt and an additional 11% on a subsequent attempt. Of the remaining applicants, 8% made one or more subsequent attempts and failed, while 5% did not make another attempt. For the 2014 cohort, 80% passed the CBE; 62% on their initial attempt and an additional 19% on their subsequent attempt. Of the remaining 2014 cohort, 12% failed on a subsequent attempt while 8% did not re-attempt testing.

Thus, while the difference for first time takers on their initial attempt was 14% between 2008 and 2014, the difference between the eventual passage rates after the four examination window was only 6%. Among those failing their first attempt, 5% did not reattempt in 2008 while 8% did not in 2014. Unfortunately the two-year passage rates for the July 2016 test takers will not be known for a few more years.

A. Eventual Pass Rates By Subgroups. Table12 shows the eventual pass rates by applicant subgroups.

Table 12

**Subgroup Bar Passage Rates after 2 Years
July 2008 vs. July 2014 First Time Test Takers**

Metric			
	<u>2008</u>	<u>2014</u>	<u>2008-2014</u>
<u>Examinees</u>	N=858	N=1578	
<u>School</u>			
CA ABA	94%	89%	-5%
Low LSAT	91%	81%	-10%
Medium LSAT	94%	90%	-4%
High LSAT	95%	93%	-2%
Non CA ABA	87%	78%	-9%
CA Accredited	55%	54%	-1%
CA Non-Accredited	45%	39%	-6%
Foreign	70%	63%	-7%
<u>Racial/Ethnic</u>			
Asian	85%	76%	-9%
Hispanic	80%	76%	-4%
Black	71%	65%	-6%
White	89%	85%	-4%
<u>Gender</u>			
Male	86%	81%	-5%
Female	86%	80%	-6%

Results from Table 12 suggest that after two years, the overall bar passage rates for the two cohorts converge, as do the rates within each of the subgroups. A difference of less than 10% in the two year success rates was observed for all of the subgroups in the two cohorts, and for several subgroups there was virtually no change. For example, there is only a 2% difference in the passage rates of applicants from Level III CA-ABA schools in the 2008 and 2014 cohorts (95% vs. 93%) and a 1% difference in the passage rate for students from ACC schools (55% vs. 54%). Historically lower performing groups (e.g., Foreign applicants, students from Level I schools, and some minority subgroups) tended to have slightly larger gaps in passage rates between the two time periods.

These findings indicate that there may be a decrease in the initial readiness of applicants or their preparation for taking the CBE since the 2008 examinations were given.

- 5. Have other statistical/psychometric properties of the examination changed over time in such a way that it may have impacted applicant scores?**

Reliability measures the degree of stability or consistency of scores on a test and is one of any test’s key psychometric property¹⁴. The lower the reliability, the higher the amount of error that exists in a measurement. Test reliability above .85 (out of 1.00) is considered acceptable for high stakes tests such as the CBE. Overall reliability on the CBE itself is a function of the separate reliabilities of the Written section, the MBE and the degree of correlation between the two. As any of these three values change, so does the reliability.

To determine whether there was any change in any of these metrics, we reviewed historical technical reports for the February and July CBEs in the study time frame. Table 13 summarizes data abstracted from these reports.

Table 13
Reliability Coefficients by Section and Total Test and
Between Section Correlations
For February and July CBEs

<u>Year</u>	<u>July</u>				<u>February</u>			
	<u>Reliability</u>			<u>Correlation</u>	<u>Reliability</u>			<u>Correlation</u>
	<u>MBE</u>	<u>Written</u>	<u>Total</u>	<u>MBE & Written</u>	<u>MBE</u>	<u>Written</u>	<u>Total</u>	<u>MBE & Written</u>
2008	.89	.80	.88	.68	.88	.75	.85	.55
2012	.90	.82	.88	.66	.89	.77	.86	.57
2016	.93	.82	.90	.73	.90	.78	.87	.61
<u>2008-2016</u> <u>Diff.</u>	.04	.02	.02	.05	.02	.03	.02	.05

The overall Total Test reliability has remained quite high since 2008, increasing slightly (but not materially) in 2016. Overall reliability on the July administrations continues to slightly outpace February’s, primarily due to the wider spread of scores on that administration. Increases in the overall reliabilities are a function of three factors. First, since 2008, the reliability of the MBE which has about ½ the weight (.35) as that of the Written section (.65) has steadily increased since 2008. Secondly, the reliability of the Written section has also increased slightly. And finally, the degree of relationship between the two sections increased over the same period (.68 to .73 on July CBEs and .55 to .61 on February CBEs), which is due in part to the increased reliability on the respective sections.

¹⁴ Validity is another major psychometric property of a test. Data available to this study precludes an evaluation of any changes that may have occurred since 2008 in any of the various measures of validity that are used.

We can conclude from these findings that the consistency in scores, as measured by test reliability has not decreased over time, and has actually increased. The increasing correlations between sections on the exam would indicate that applicants are beginning to perform at more equivalent levels on the respective sections than in the past. This finding could dampen the compensatory nature of the current scoring method. However, none of these changes appear large enough to impact the decrease in scores and the subsequent passage rates.

6. How would the bar passage rates have changed if the cut point were set at standards used by other states?

Increasing concern voiced over California's high passing standard led us to ask how much the change in passing rates would have been impacted if California had adopted a lower passing score more in line with that used in other states. To conduct these analyses we focused on the July CBEs only. For each of the three years in the study timeframe we calculated the final TSS of all applicants and evaluated the distribution of those scores. We classified applicants as passing or failing using three different standards: 1) the current California standard of 144 (1440); 2) a standard of 135 (1350) which is used by the largest number of states in the country; and 3) a standard of 133 (1330), which is the standard currently used by New York. New York's standard was selected because the state tests the largest number of examinees in the country and is the only state testing more applicants than California. We then calculated the percentage of California applicants that would have passed under each of these standards for the July CBE in each of the three study years¹⁵.

Results presented in Table 14 indicate that if the modal U.S. standard of 135 were used, 66% of all applicants would have passed the July 2016 CBE (i.e., 22% more examinees). This rate would be 15% lower than the estimated passing rate for the 2008 exam if the 135 standard was applied. Using a standard of 133, 7 out of 10 examinees would be estimated to pass and the difference from 2008 would drop to 13%.

The first-time passing rate provides a more direct comparison between the two time periods. At a 135 standard, 19% more first timers would have passed, and the difference between 2008 and 2016 would differ by only 13%. At a 133 standard, that difference is less than 10%.

Refining the comparison even further, we performed the calculations on first-time test takers from CA-ABA schools only (historically the best performing group of all applicants). Results are presented in Table 15.

¹⁵ We acknowledge two limitations of these calculations. First, if alternative passing standards were used, different regrade bands may have been used. Second, some repeating applicants might have passed on an earlier attempt. We do not believe that the impact of these limitations is significant and that the directionality of results is valid.

Table 14

**Actual and Estimated CBE Passage Rates
At Alternative Passing Points
July Examinations**

<u>Year</u>	<u>1st Time Taker</u>			<u>Repeater</u>			<u>All Examinees</u>		
	<u>144</u>	<u>135</u>	<u>133</u>	<u>144</u>	<u>135</u>	<u>133</u>	<u>144</u>	<u>135</u>	<u>133</u>
2008	75%	89%	91%	28%	60%	68%	62%	81%	84%
2012	69%	86%	89%	18%	52%	61%	56%	77%	82%
2016	57%	76%	80%	17%	46%	54%	44%	66%	71%
<u>2008-2016</u> Difference	18%	13%	9%	11%	14%	14%	18%	15%	13%

For test takers from Level I Schools, there remain large differences between 2008 and 2016 examinees (29%, 26% and 19% decreases at the three respective standards). However, the differences in the students from upper level schools paint a slightly different picture. At the modal standard (135) there is only a 9% difference in passage rates from 2008 to 2016 in Level II schools, and only a 7% difference in Level III schools. Over 85% of first time takers from these ABA schools would have passed on the July 2016 examination.

Table 15

**Actual and Estimated CBE Passage Rates
At Alternative Passing Points
1st Time Takers at CA ABA Schools**

<u>Year</u>	<u>Level I Schools</u>			<u>Level II Schools</u>			<u>Level III Schools</u>		
	<u>144</u>	<u>135</u>	<u>133</u>	<u>144</u>	<u>135</u>	<u>133</u>	<u>144</u>	<u>135</u>	<u>133</u>
2008	77%	93%	94%	83%	94%	96%	87%	96%	97%
2012	67%	88%	91%	76%	94%	95%	85%	95%	97%
2016	38%	67%	75%	64%	85%	89%	76%	89%	91%
<u>2008-2016</u> Difference	29%	26%	19%	19%	9%	7%	11%	7%	6%

How would California applicants have fared relative to their counterparts in New York, all things held equal?¹⁶ New York reports its general statistics (similar to California) after each administration (<https://www.nybarexam.org/ExamStats/Eststats.htm>). From that site, we determined that closest type of comparison that could be made between California and New York was the bar passage rate of first time test takers from ABA approved institutions. We extracted these statistics for the same three July examinations included in our study time frame. We then calculated an estimated passing rate using the 133 standard that New York applies. The results are summarized in Table 16.

New York, which switched to the UBE in 2016 saw a 9% decrease (from 91% to 82%) in its passage rate between 2008 and 2016. For the CBE, when the 133 standard was applied to students who attended CA-ABA schools, fully 96% of those test takers would have passed the CBE in 2008, 95% in 2012 and 87% in 2016. The decrease between estimated 2008 and 2016 passage rates was 9%; identical to the New York drop. Further, within-year comparisons between the two states show California estimated to have passed 5% more candidates. It is interesting to note that several other states testing larger pools of applicants and having passing standards more closer to the modal mark of 135 (e.g., Texas, Massachusetts, Florida and New Jersey) all experienced decreases in their passing rates between 2008 and 2016 that ranged from about 8% to 12%.

Table 16

**Actual New York & Estimated CBE Passage Rates
For 1st Time Test Takers
At ABA Schools**

<u>Year</u>	<u>New York Actual % Passing @ 133</u>	<u>California Estimated % Passing @ 133</u>	<u>Difference</u>
2008	91%	96%	+5%
2012	85%	95%	+10%
2016	82%	87%	+5%
<u>2008-2016 Difference</u>	9%	9%	0%

¹⁶ Note that in July 2016, New York switched to the Uniform Bar Examination (UBE) which included nationally administered written section along with the MBE. New York calculates its scale scores similarly to California's but it now gives its MBE and Written Section equal weighting.

V. SUMMARY AND CONCLUSIONS

A continuing drop in the percentage of applicants passing the California Bar Examination (CBE) has generated a considerable amount of public discussion. The trend has been nationwide and led to much debate about the underlying causes. Declining law school enrollments, changes in legal training curriculum, examination content and standards, and the quality and composition of examinees have all been cited as possible causes. Electronic CBE databases maintained by the Office of Admissions of the California Bar provided an efficient method of profiling where the declines have occurred as well as offering some initial insights into their causes.

Data on various characteristics of applicants and their CBE performance was abstracted from the existing databases for each of three years: 1) 2008, the year with the highest passage rate since 1997; 2) 2016 the most recent year for which data were available and when CBE results dropped to the lowest levels since before 1990; and 3) 2012, a midpoint between these two extremes. During the 9 year period there was an 11% decline in the number of July test takers and a corresponding 4% increase in February examinees, which historically include a higher proportion of applicants repeating the CBE than in the July administration. The relative mix of examinees also shifted between 2008 and 2016 as traditionally higher performing groups made up proportionately less of the total test takers. For the July administrations, first time test takers decreased by 6%, applicants from out of state ABA schools declined by 4%, and non-minority test-takers declined by 6%. Female test takers became the majority gender in 2016 as well.

Other key findings include the following:

- In terms of performance, the overall average Total Scale Scores (TSS) and bar passage rates dropped 66 points (1481 to 1415) points and 18% (62% to 44%) respectively for July applicants in 2016 as compared to 2008. The decrease was less pronounced for the February administration (13 points and 4%, respectively).
- The magnitude of the changes was not equal in all groups. For example, on the July CBE 1st time applicants passage rates dropped 18% versus 11% for repeaters; applicants from CA ABA schools with higher median LSAT scores dropped 11% as compared to an almost 30% decrease for applicants from lower LSAT schools.
- The drop in passage rates in the various racial/ethnic groups, however, varied by only 5%. Relatedly, the drop in scores on the Written and MBE sections were roughly equivalent within the various groups, suggesting that neither section disproportionately contributed to the change.
- Results from an estimation model indicated that all things being held equal, roughly 20% of the change in July CBE scores and 17% of the change in bar passage rates could be attributed to the change in the mix of test takers between 2008 and 2016.

Further exploration of the distribution of scores revealed that a highly disproportionate number of test takers scored at the very lowest levels of the distribution in 2016 relative to 2008 (21% vs 10%). A comparison of the composition of test takers scoring in lowest percentiles of applicants showed that while the percentage of all subgroups among these lowest performers increased between 2008 and 2016, there were relatively higher changes for some groups than others. For example, there was an 11% increase for the low LSAT school students compared to 5% from the higher level schools and 21% increase in Non-Accredited schools. Asians increased by 16% compared to half that in Hispanics and Whites.

To gain insights into applicant preparedness we examined bar passage *after two years*, reasoning that perhaps more recent candidates may not have been as prepared on their first attempt. A study of first time takers in July 2008 and 2014 showed that while the passage rates on the initial attempt for these years differed by a full 14% (75% vs 61%), the difference fell to 6% after a two year follow-up window (86% vs. 80%). The difference between two year pass rates (as compared to the one year rates) again tended to be relatively higher in historically lower performing groups.

Traditional psychometric characteristics of the test that could be measured with the available data showed no degradation in the Written, MBE or Total Test scores. Actually, the reliability coefficient increased slightly from 2008 to 2016, and the correlation in performance between different sections of the exam also rose (from .55 to .61) as a result. The magnitude of these changes would not have a material impact on passing rates.

Finally, the analysis of the impact of the passing standard (i.e., “cut score”) on the 2008 to 2016 decrease revealed that the differences between the two years would have been projected to drop by 3% if the national modal standard (135) was used and 2% more if a standard of 133 was used. A direct comparison with New York (which is the only state that tests more applicants than California and also changed to the Uniform Bar Examination in 2016), using only 1st time ABA takers and the 133 standard, revealed identical 9% drops in the passing rates in both states. This finding lends supporting evidence refuting the contention that the decreases in passage rates were caused in part by California’s non-adoption of the UBE.

These analyses suggest that while the change in composition of test takers and the passing standard itself may have led to some of the performance decreases between 2008 and 2016, there are most likely other factors in play. Institutional factors such as changes in curriculum and admission policies may have contributed. Also, completely unmeasured in this study are both latent legal ability of applicants and their law school performance. Our study used known correlates for these measures (often to limited groups of students) rather than individual student abilities.

From the available data, we cannot discern the degree to which these student-related factors have changed. However, some of the differences that were observed in this study between performances at the various levels of the CA ABA schools point to possible decreases. It is also possible that other qualitative factors such as poorer student study habits and decreased motivation may have played a role. Assessment of the nature, size and directionality of such factors require additional data.

This study also did not address whether the content of the CBE remains relevant to an assessment of minimum competency to practice law, or whether the current standard remains appropriate in today's practice environment. These are issues that require different data and different methods.