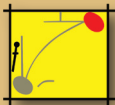


ANALYSIS
OF
CA
FINAL
EXAMS

Class of 2009 June

.....A Prime Academy
Research Report



Prepared by:

Prime Academy Research Team

Source:

This document is based on sample data accessed from ICAI's website. The ICAI is in no way part of this analysis.

Caveat:

While all care has been taken to ensure that the data provided in this Report is accurate, the Academy will not take any responsibility for decisions that anyone may take on the basis of this report.

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 - Who are India's Top Auditors, 2008
 - Attributes of a Great Teacher
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-

How did “Class of 2009J (CA Final)” Fare

The chartered accountancy examination is considered to be the second toughest professional examination in India; the pride of place going to the Indian Administrative Service. While the Institute of Chartered Accountants of India (ICAI) does provide some inputs on the examination results, by and large, some of the finer details are not available for public consumption.

There is therefore a fairly urgent need to answer a few fundamental questions. This Analysis of the June 2009 CA Final examination is intended to provide answers to a few pointed questions. Like:

- what the pass percentages are;
- how many failed courtesy “aggregate”,
- what was the quality of the candidates explained in terms of the marks scored;
- where did the candidates fail;
- did they fail marginally or spectacularly;
- which were the success subjects.

How did we do the Analysis?

We began by ascertaining how many took the exam. In statistics, this is called the “population”. To ascertain this we looked into the ICAI’s exam result website which says “Enter your five digit roll number”. So we tested out for a candidate with a Roll No 10,000; got a response and then in random checked out to find that there were no numbers beyond 39,890. Hence our ball park estimate is that about 30,000 candidates took the examination.

Random Sampling

“4% error estimate and 99% confidence level” means that if the check is repeated, then 99 out of 100 times the results would be this way or that by a maximum of 4% in relation to the results that we get out of using this sample.

The next step was to decide the sample size. Surely it would not make sense to tap data of all the 30,000 candidates. The solution lay in applying the principles of sampling which auditors, psephologists and other analysts swear by. A software that we use suggested that for a 4% error estimate and a 99% confidence level the sample size should be 1002.

For simplicity we rounded off the number to 1,000. We then used the random number table generated by the software to decide on the candidates whose marks we would tap. Interestingly, 162 of the numbers selected did not appear in the ICAI exam result list. This could perhaps mean that 16.2% of the candidates did not elect to take the exams that they were supposed to take. We substituted this with a fresh set of 162 numbers, again using the Random Number Table generator.

What are the Findings?

We break the findings into 5 parts

PART 1: Passes-Good and Pathetic

The first critical number is the pass percentage. While the ICAI has since put up the percentages on its website our sample threw up interesting results. While it is easy to define “pass percent” in respect of candidates who took both Groups of CA final, the definition of “pass percent” of a Group can be tricky. We have chosen to look at it in two ways. One, to show the pass percent of those who take “one Group” only. And two, to show the pass percent of those who “Appeared in the Group” a k a composite results.

Table 1: Pass Percentage

Appeared	Students	Pass	Percent
Group 1 and passed Group 1	195	44	22.6%
Group 2 and passed Group 2	273	39	14.3%
Both Groups	532		
Passed Group 1 only		107	20.1%
Passed Group 2 only		12	2.3%
Passed Both Groups		82	15.4%
Total	1,000	284	28.4%
Composite Result			
Group 1*	727	233	32.0%
Group 2*	805	133	16.5%
Total	1,532	366	23.8%

* Including those who wrote both groups

“Took Group 1 only” would mean that the candidate wrote that Group only and did not take the other group. “Took Group 2 only” would mean that he wrote that Group only and did not take the other group.

“Appeared in Group 1” (a k a composite result) would include those who took both groups. “Appeared in Group 2” (a k a composite result) would include those who took both groups. Ditto when it comes to number of people who passed that group.

For example, if 100 candidates took Group 1 only, 150 took Group 2 only and 75 took both groups, the number of candidates who “Appeared in Group 1” would be $100 + 75 = 175$ while the number who “Appeared in Group 2” would be $150 + 75 = 225$. And if 30 passed Group 1 only, 20 passed Group 2 only and 15 passed both Groups, the number passing Group 1 would be $30 + 15 = 45$, the number passing Group 2 would be $20 + 15 = 35$.

ICAI's announcement

Group	% of pass
Both Groups	13.85
Group - 1	32.42
Group - 2	15.03

www.icai.org

How many qualified?

Unfortunately there is no way that we could find how many qualified during the current session. For, there would be some who had passed one Group earlier and now were passing the other Group.

This we believe is the appropriate way of assessing pass percent of a Group.

A few quick conclusions follow from Table 1:

- The CA course can no longer be derisively dismissed as a 2% course as the results are a lot better. Of-course there is scope for it to be still better.
- Of the 1000 candidates in the sample, 284 passed one group or other. They had, in other words, cause for celebration. One interpretation hence is that the overall success rate is 28.4%.
- The composite result is 23.8%. To understand this we need to understand the number 1532 in our table. If one candidate took both groups he is counted as 2 candidates. From that stand point there are 1532 candidates. If a candidate passes both groups, it's counted as 2 passes. This gives a result of 23.8% which is a second indicator of the success rate.
- At 32%, the Group 1 result (including those who wrote both groups) is good while at 16.5%, the Group 2 result is definitely pathetic.

PART 2: Success delayed, not denied?

Table 2:

Failed In	GROUP 1		GROUP 2	
	Total	%	Total	%
One subject	181	24.9%	129	16.0%
Two subjects	122	16.8%	211	26.2%
Three subjects	100	13.8%	204	25.4%
Four subjects	36	5.0%	103	12.8%
Aggregate	55	7.5%	25	3.1%
Passed	233	32.0%	133	16.5%
TOTAL	727		805	

Why did a candidate fail the exam? Was it because he failed in a subject or was it because he failed to crack the “aggregate” code? The “aggregate” clause has historically drawn a lot of flak amongst people; not just amongst the student community but amongst the academia as well.

“How can the candidate be said to have passed in all the subjects of a Group and then said to have failed the Group” is the refrain. “You can’t say that the candidate has done well in all the subjects and then say he has not done well!” In other words, these men look at the passing requirement as having two thresholds; first a 40 and then a 50. Is that view necessarily right?

Table 3:

% of Failure	GROUP 1		GROUP 2	
	Failed in	Failed	Failed	Percent
One subject	181	36.6%	129	19.2%
Two subjects	122	24.7%	211	31.4%
Three subjects	100	20.2%	204	30.4%
Four subjects	36	7.3%	103	15.3%
Aggregate	55	11.1%	25	3.7%
TOTAL	494	100.0%	672	100.0%

Our take is a shade different. A student should not look at the passing requirement as 40 marks per subject and 50 on the aggregate. Rather, he should look at it as 50 marks per subject with the rider that the ICAI offers him a concession to go down by as much as 10 marks in any or many subjects so long as he compensates for the shortfall by scoring in other subjects! In other words, we look at the passing requirement as having only one threshold; namely 50 followed by a safety net of 40.

Success Rate

Success rate is 28.4% over all, in the sense that of every 1000 candidates who took the exam, 284 found success in one group or the other.

The debate

There is a very simple but very powerful message in this for ICAI. Market the examination this way, and there will be no “aggregate” complaint. In-fact, it would receive a compliment.

Arguments notwithstanding, a look at how many didn't win because they didn't win in a subject or because they didn't cross the aggregate is worth looking.

Here are a few observations:

- In Group 1, 11.1% of the total candidates who failed, failed because they did not get the overall total of 200 in that Group, In other words they got their 40 in each subject but not the overall total of 200. In Group 2, 3.7% of the total candidates who failed, failed because they did not get a total 200 in that Group. We believe that these percentages are too small for anyone to cry foul over the aggregate clause.
- The extent of failure in Group 2 is a lot more alarming than that in Group 1 with more than 78% of the failed students failing in two or more papers. The corresponding number in Group 1 is 52%.

PART 3: The Marks Story

To understand the quality of performance it is instructive to look at the class interval of marks. This tells a very revealing story.

The range of marks scored in each subject is captured in Table 4.

The pass percent for Group 1 when a candidate sits for both Groups is remarkably better than that if he sits for Group 1 only. (35.5% vs. 22.6%). The pass percent for Group 2 when a candidate sits for both Groups is marginally better than that if he sits for Group 2 only. (17.7% vs. 14.3%). Whether this means that those writing both Groups have a better chance of passing a Group or whether they are inherently better students is a matter of debate.

Table 4: Range of Marks

Range	GROUP 1					GROUP 2		
	ACCTS	MAFA	AUDIT	LAW	COST	MICS	DTAX	IND TAX
0-9	0	1	3	6	2	1	3	9
10-19	10	7	22	16	49	9	59	41
20-29	79	31	77	52	178	54	202	129
30-39	194	62	168	141	263	124	280	171
40-49	202	146	372	319	217	214	200	268
50-59	186	159	64	146	70	251	44	124
60-69	50	185	9	34	23	116	11	51
70-79	5	102	0	0	1	27	0	4
80-89	0	21	0	0	0	1	0	0
90-99	0	1	0	0	0	0	0	0
Absentees	1*	12*	12*	13*	2	8	6	8
Total	727	727	727	727	805	805	805	805

*Includes one candidate in the sample whose result has been withheld

Statistically speaking, the performance in Accounts resembles a normal distribution curve, skewed a shade to the middle while in MAFA the performance sits bang on the curve. The performance is clearly best in MAFA not only in terms of the pass percent in that subject but also in the scoring rate (60 and above). This should partly be on account of the relative ease of the paper. The next best overall performance is in Law, followed by Accounting and Auditing.

Pass Percentage and Scoring Rate

Table 5: Group 1

Subject	Accounts	MAFA	Audit	Law
Pass percent	61.1%	86.1%	62.9%	70.4%
Above 60%	7.7%	44.2%	2.9%	6.5%

Table 6: Group 2

Subject	Cost	MICS	D Tax	Ind Tax
Pass percent	39%	76%	32%	56%
Above 60%	2.9%	17.9%	1.4%	6.8%

In Group 2, the results, save MICS, have been pathetic. The pass percent is under 40 in Costing and in Direct Tax. The number of people scoring over 60 is negligible except in MICS. If the performance in the three core subjects of CA namely Direct Tax, Auditing and Accounts are border-line there is something for the ICAI to sit up and take notice. Table provides the telling story

A slew of numbers in respect of each subject is computed (Table 7) to understand the quality of performance.

- The mean or the average marks gives a general idea of the performance of the student. This average is above 50 only in the case of MAFA. In the case of Audit, Cost and Direct Tax it is under 40. Should we then say that the class of 2009M has failed in these subjects? The average in Indirect Tax, Law and Accounts is under 43. Doesn't give scope for much joy.
- The average marks can be misleading. It can hide the overall performance on account of extremes at either end; big daddies and poor performers. The median mark is far more interesting because it tells you what was the mark which 50% of the candidates got. Very interestingly there is hardly any difference subject wise in the mean and the mode, indicating that the performance of the class was generally uniform. The CA collegium is heterogeneous.

- There have been zeroes scored in some subjects. Sad but true.
- It can be disappointing to get 39 in a subject. 16 candidates got just that in Accounts; in cost accounting the number was 29; in Direct Tax 25 and in MICS 17. It is another matter that none of these candidates did really well in other subjects to generate a sympathy factor.

Best in class
 The best marks in each subject from our sample

Table 7: High, Med, Low:

	Mean	High	Low	Med	Mode	Subject 39
Accounts	43	78	15	42	50	16
MAFA	55	91	8	56	66	4
Audit	39	64	2	40	40	5
Law	42	67	0	43	40	5
Total Group 1	177	273	15	181	200	NA
Cost	36	71	5	36	43	29
MICS	48	82	0	49	51	17
Direct Tax	34	67	0	34	40	25
Indirect Tax	40	73	4	40	40	3
Total Group 2	157	259	10	160	162	NA
Grand Total	334	527	118	342	342	NA

PART 4: Super Sixty

Sixty is considered to be an important number in professional examinations. In fact if you managed 61% this June 09, you would have landed yourself in the Merit List. So a look at how many got 60 in one subject, in two subjects etc can be instructive. Of-course the other importance of 60 is that, if you get sixty in a paper

and yet fail the Group you are exempt from writing the paper the next time around.

A quick glean from the sixty club reveals:

- No candidate has scored 60 in all four subjects of a Group

Table 8: 60 counts

60s	Composite Group 1	Composite Group 2
None	401	632
In One sub	266	145
In Two Subs	44	17
In Three Subs	16	11
In Four Subs	0	0
Total	727	805

- Only a handful of students have managed to score past 60 in three subjects in Group 1
- A fairly large number of students have scored more than 60 in one subject
- The number of students managing 60 plus in one subject is significantly less in Group 2

- Candidates appearing for both groups have done better than those who have appeared for only one Group in scoring past 60.

PART 5: The non-serious player

Drop Outs: There is the propensity amongst students to apply for the exams, pay the fees for it, receive the hall ticket and then not take the exams for a variety of reasons. While we have not taken these numbers in the computation of pass percents it would be instructive to find the dropout percents. Our definition of a drop out would be someone who has not turned up for all the subjects of the Group.

No student is marked as absent in all the four subjects of the group. The fact that some numbers in the sequence are missing could mean that these numbers are withdrawn possibly because the candidates did not take up the exam. As indicated earlier this is 16.2%. The drop out is likely to be 16.2%.

Half way drop outs: There is also a propensity amongst candidates to take a paper or two in a group and then drop out either because they had done the paper poorly or in their judgment their performance was sub-par and that they felt that they had no prospects of clearing the group. There would of-course be the legitimate reason of falling sick. Whether the sickness was because of lack of performance or otherwise is debatable. Computing the proportion of such dropouts gives one an indication of non-serious candidates or candidates lacking in self-confidence. As Table 9 shows this is not significant.

Table 9: Half way drop outs

Half way drop outs	Group 1	Group 2
Appeared	727	805
Wrote and Dropped Out		
After 1 paper	11	4
After 2 papers	0	3
After 3 papers	1	1

Non-serious: Anyone who applies for but doesn't take the exam in full or in part; anyone who gets less than 20 marks in a subject is in our definition a Non-serious player. In Group 1 the percent is 2.2% and in Group 2 is 5.4%

IN RETROSPECT

Here is a summary of the research

The Merit List

Our sample threw up 4 rank-holders from out of the sample of 1,000. Given a population of 30,000 it would be reasonable to expect that about 120 candidates would have shared the 50 ranks.

- The sample is very representative given that the pass percent findings are tellingly close to those announced by the ICAI.
- The course has clearly moved away from being a 2% to being a 25% course. Whether this can improve further depends on the quality of the intake.
- The composite rate is 24% and the success rate is 28%.
- The results are handsome by CA standards, but performance in Group 2 is extremely poor.
- The cause for failure is not the inability to get an aggregate but the inability to score 40 in each subject
- The pass percentage in each subject except MAFA and MICS is extremely low
- People scoring more than 60 in 2 subjects appears to be the exception
- Non-serious candidates, if you leave out those who did not take any paper, is negligible.
- The CA student population is a heterogenous group falling broadly in a normal distribution pattern with uniform mean and mode!