

How Contemporary Are IIMs?

MBA Curricula in a Globalised World

A unique benchmarking methodology is used to examine how the core curriculum at the Indian Institutes of Management (Ahmedabad, Bangalore, and Calcutta) compares with the business curricula of the world's best business schools. The evidence presented here indicates that the IIMs are facing difficulty in adjusting to the new paradigm that requires specialisation and close cooperation with the innovating enterprises aiming to world-class performance rather than with planners and administrators. Curriculum change in the IIMs seems to be based on feasible incremental change rather than on new knowledge, the needs of the students or the demands of an increasingly globalised and interconnected business world. With a greater focus on integration and knowledge creation along with changes in internal systems and processes, the IIMs can match the best business schools in the world.

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Business problems are complex problems.¹ The purpose of MBA education programmes offered by business schools across the globe is to provide their students with the knowledge and skills required to function in this complex world. Management education has to combine explicit knowledge of basic disciplines with the tacit knowledge that comes from practice.²

Top business schools cater to this complexity by tailoring their curricula to address various kinds of learning. Learning by teaching (lectures, case discussions), learning by doing (projects as part of courses and real life projects with industry) and learning by experiencing (workshops, international study projects) are common elements of top business school curricula. Management education has to combine explicit knowledge of basic disciplines with the tacit knowledge that comes from practice.

Schools divide their curriculum into two parts – a core part and a set of electives. All students take the core part of the curriculum. Students are also offered a set of electives from which they can pick a menu depending on their interests.³ Business schools differentiate themselves from each other not only on the basis of their core offerings but also through the set of electives that they offer to the students. All top schools provide students with the knowledge and skills required to suit a generic general management function that can be used in a wide variety of business settings. Some schools combine this 'general management focus' with more specific specialisations in the major functional areas of management like finance, marketing, strategy, operations and human resources management. Still other schools, especially the bigger ones, offer additional specialisation catering to specific sections of the business world by offering concentrations in areas like entrepreneurship, real estate management, information technology, biotechnology, health management, consulting, etc.

Managing Curriculum Change

Schools cope with the changes forced on them by periodically reviewing the curriculum to bring about appropriate changes. New research and management practice are often the major drivers of such changes. More recently there has been concern

among the top business schools that rankings put out by the 'popular press' are forcing schools to change in response to the whims and fancies of a not so rigorous ranking methodology adopted by the media. According to this view such forced short-term responses may have an adverse impact on the quality of MBA education⁴ [Anshuman 2002; Zimmerman 2001].

The normal practice to bring about change in business schools is to appoint a curriculum review committee comprising a set of faculty. While committees may seek views of fellow faculty members, solicit recruiter views, talk to alumni, etc, a major input into the review is a comparison of the school's curriculum with the curricula of a set of benchmarked schools, on a school-by-school basis. Based on such comparisons certain conclusions are drawn.

While it is easy to compare a pair of schools, it is quite difficult to precisely position a school with respect to a set of benchmark schools. Questions about the relevance of the choice of the benchmark schools and the need to factor in student and recruiter views about the relevance of change can complicate the review process by reopening the basic assumptions that went into the review.

Debates within MBA faculty bodies tend to be elaborate, acrimonious, and not clearly anchored on objective criteria. The recommendations are also difficult to communicate to faculty, who carry with them their own biases with respect to any kind of change. Consequently, strategic insights drawn from such pairwise comparisons are difficult to implement. Since the process of changing curricula in business schools is largely political, problems of interpretation of the curriculum position of a school vis-a-vis other schools tend to complicate an already complex process of managing change. If some part of such benchmarking exercises can be made more objective it may be easier for many schools to manage curricula change.

The authors of this article were fortunate (or unfortunate) enough to be members of a curriculum review committee at one of the business schools in India – the Indian Institute of Management Bangalore. The authors developed an approach to curriculum review that provides a more objective appraisal of the curriculum position of a school with respect to a set of benchmarked schools [Anshuman and Chandrashekar 2003]. The

advantage or novelty of this approach is that it not only enables the concerned school to benchmark against any chosen school but also provides a clear picture of the position of the school vis-a-vis a set of benchmark schools.

In this study, we apply the benchmarking methodology discussed in Anshuman and Chandrashekar (2003) to assess the relative positioning of Indian Institutes of Management with respect to the top ranked schools in the world.⁵ In particular, we have compared the core curricula of three of the top business schools in India – the Indian Institute of Management Bangalore (IIMB), the Indian Institute of Management Ahmedabad (IIMA) and the Indian Institute of Management Calcutta (IIMC) – with the core curricula of a set of benchmark schools.⁶

Concepts, Approach and Methodology

In principle, school curricula differ from each other in multiple dimensions such as subject offerings, the number of credits offered in each subject, the contents of courses associated with each subject, the teaching methods, etc. While all these dimensions may be relevant, the surfeit of information associated with using them all together often ‘hide the wood in looking at the trees’. Determining the direction of change becomes extremely difficult in such situations.

The Anshuman and Chandrashekar (2003) methodology, as described below, addresses this problem by aggregating key differences in curricula between a school and a set of benchmark schools in an easy-to-understand intuitive way and uses this aggregated information to first position schools. Using this overall mapping as a base reference, the faculty body at a school can identify a reasonable benchmark that is worth emulating and the direction of change required to achieve it⁷ [Segev et al 1999]. After this stage, one can use the more detailed information collected on subjects, credits, course content, pedagogy, student and recruiter preferences, etc, to fine tune the findings and carry the analysis to its logical end.

Aggregating Key Differences among School Curricula

The typical business school curriculum covers several subject areas, e.g. finance, marketing, etc. More than one course could be offered under each subject heading. Furthermore, similar courses offered in two schools might differ in the number of contact hours spent in class (credits). In short, curricula differ in terms of subject offerings, course offerings as well as credits associated with the courses. For convenience, we will use the terms ‘subject’ and ‘courses’ interchangeably since for all practical purposes, the distinction is unimportant.

Using the Anshuman and Chandrashekar (2003) methodology, differences in the core curricula between a top Indian school like IIMB, IIMA or IIMC (referred to collectively as IIMs or the top Indian schools) and a comparison school like Wharton can be aggregated into differences in the following three orthogonal categories:⁸

(a) *Differences in common credits*: This reflects the difference in course credits associated with the same subject areas in both the Indian school say IIMB (or IIMA or IIMC) and the comparison school.

(b) *Differences arising due to IIM unique credits*: This reflects the course credits that are offered only by the Indian school say IIMB (or IIMA or IIMC).

(c) *Differences arising due to comparison school unique credits*: This reflects the course credits that are offered only by the comparison school.

This approach enables the transformation of an ‘n’ dimensional comparison problem into a more manageable and more intuitive three-dimensional comparison problem. The chosen Indian school say IIMB (or IIMA or IIMC) and the benchmarked set of schools can then be mapped in a three dimensional space that represents the above three categories. We can then look at the differences between the Indian school say IIMB (or IIMA or IIMC) and the set of benchmarked schools to understand why the chosen Indian school say IIMB (or IIMA or IIMC) is different.

With regard to the common course credits, micro-level data on subjects, credits, pedagogy and course outlines from the Indian school like IIMB (or IIMA or IIMC) and the chosen set of benchmarked schools can be further analysed to determine higher orders of differences between the schools.

The Benchmark Schools

In the review exercise carried out at IIMB we picked 14 business schools to serve as the benchmark set. The schools chosen were Harvard, Wharton, Stanford, Chicago, Kellogg, MIT, Duke, Berkeley, Michigan, Columbia, Tuck, Rochester, CMU and UCLA.⁹ The choice of these schools was based on the fact that in all international business school surveys carried out in the last few years these schools have been consistently ranked as the top business schools. Review committee members who had spent time in some of these schools also felt that these schools would be the ones to pick for a benchmarking exercise. Each of the three IIMs was separately compared with the set of benchmark schools (as well as with each other) along the dimensions of ‘common course credits’, ‘IIMB (or IIMA or IIMC) unique course credits, and ‘comparison school unique course credits’. This amounts to generating three position charts, one corresponding to each of the three IIMs.

Table 1 constitutes the basic data set used in our benchmarking exercise. The core curricula of all the benchmark schools and the three IIMs were examined and the various courses were grouped into 18 subject categories starting with Operations Research (OR) and ending with a category ‘others’ as shown in Table 1. The categories chosen were based upon and derived from the categories used by Segev (1999) in his study of the core curricula of business schools (with some minor changes). They cover all major areas present in the core curriculum of most business schools. The subject categories include or, statistics, microeconomics, macroeconomics, accounting, operations management, organisational behaviour, human resources management, marketing, strategy, information systems as well as some other subjects through which schools try to differentiate themselves.

The credits offered by each school in each subject category are entered into the appropriate cell of the table. Since a credit is defined differently by different schools all credits were normalised to IIMB practice using the norm 33 class contact hours = 3 credits. For example Harvard offers two courses in finance each with 44 class contact hours. The entry under the subject category finance for Harvard will therefore be 8 credits.

The subject category ‘others’ are courses that do not fall into any of the 17 subject categories. One could expand the list of subject categories grouped under ‘others’ to list each one of them

separately. However to make the data analysis and table sizes more manageable they have all been grouped together under the category 'others'. This practice is okay as long as we remember to break up the 'others' category into 'common course credits', 'IIMB (or IIMA or IIMC) unique course credits', and 'comparison school unique course credits' when we look at the differences between an Indian school like IIMB and the comparison school. Since the details of what constitutes 'others' are available in our compilation of the subject and credit data, we can easily do this.

A 'typical school' is defined as a school that has all the subject categories offered by at least 50 per cent of the benchmark schools. The credits for the subject offerings of a 'typical school' are based on the average credits offered in these subjects by the benchmark schools offering that particular subject. Table 1 – which we will refer to as the course-credit table since it captures both the subject (or course) and credit information in an integrated way – will be the basis for much of the analysis that follows.

Positions of IIMs with Respect to Benchmark Set of Schools and Each Other

From the basic data of Table 1, we can construct a table of differences. A subject like finance which forms a part of the core in most business schools may have 8 credits or 88 student contact hours at Harvard and only 44 student contact hours or 4 credits at IIMB.

Since Harvard offers more credits than IIMB in the same subject area of finance, differences arise in the common part of the curriculum due to the differences in depth of coverage (8 – 4 = 4 credits). These 'differences in common course credits' along with 'differences arising due to IIMB unique course credits' and 'differences arising due to comparison school unique course credits' will all contribute to the total difference between IIMB and the comparison school. The various schools can be positioned with respect to IIMB in the curriculum space along

these three dimensions.

To understand how we can construct such a table of differences let us look at the differences between the IIMB and Harvard curricula. From Table 1 we can see that Harvard offers a total of 45 credits and IIMB a total of 48 credits. Harvard and IIMB have eight common subjects. For the common core courses, Harvard offers 36 credits and IIMB 28 credits. Eight courses with a total of 20 credits are unique to IIMB and not offered by Harvard. These are OR, statistics, microeconomics, management information systems (MIS), human resources management (HRM), law, management communications and market research. Harvard offers three unique courses with a total of nine credits not offered by IIMB. These are entrepreneurship management, negotiations and ethics.

This information obtained from Table 1 by inspection can now be used to construct a table of differences. In the eight subjects that are common to IIMB and Harvard, IIMB offers 28 credits as compared to the 36 credits offered by Harvard. The difference between IIMB and Harvard along the dimension 'common course credits' is therefore 28 – 36 = -8. Since by definition IIMB unique course credits are not offered by Harvard, the difference between IIMB and Harvard arising due to the 'IIMB unique course credits' is 20. The same argument can be used to get the differences between IIMB and Harvard arising due to the 'Harvard unique course credits'. This works out to be 9 credits.

These differences between IIMB and the other schools in Table 1 can be represented in a three-dimensional space. The origin of this space will be the difference between IIMB and IIMB. Since by definition all courses and credits are common between IIMB and IIMB and since there are no 'IIMB unique course credits' or 'comparison school course-credits' when IIMB is compared with IIMB, the origin will have the coordinates 0,0,0 in three-dimensional space.

Table 2(1) provides data on the differences between IIMB and the 14 benchmark schools. It also gives details of the differences between IIMB and the other two IIMs (IIMA and IIMC) along the three dimensions used to measure differences. Tables 2(2)

Table 1: Course Credits for IIMs and Benchmark Schools in Core Curriculum

School	OR	Stat	Fin	Acc	Macro	Micro	Mktg	OB	Opns	MIS	Strat	Int Mgt	HRM	Law	Oth Env	Mgt Comm	Ethics	Oth	Total
IIMB	2	3	4	4	3	3	3	5	4	3	3	0	3	2	2	2	0	2	48
Harvard	0	0	8	4	4	0	4	4	4	0	4	0	0	0	4	0	1	8	45
Wharton	2	2	4	6	4	2	4	4	4	0	2	2	0	2	1	1	1	0	41
Stanford	3	3	3	6	0	3	3	6	3	3	3	3	3	0	0	0	1	1	44
Chicago	3	3	3	6	3	3	3	6	3	0	3	0	0	0	3	0	0	0	39
Kellog	3	3	3	3	0	3	3	3	3	0	3	0	0	0	0	0	0	0	27
MIT	1.5	1.5	3	3	3	0	3	0	3	3	3	0	3	0	0	0	0	3	30
Duke	2.5	2.5	2.5	5	2.5	2.5	2.5	2.5	2.5	0	0	0	0	0	0	3	1	1.5	30.5
Berkeley	0	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	0	2.5	0	0	0	0	1	1	0	24.5
Michigan	0	2	4	6	0	4	4	2	2	0	2	2	0	1	0	1	1	10	41
Columbia	2	2	4	6	2	4	4	4	4	0	2	0	0	0	0	0	0	0	34
Tuck	5	3	5	3	2	3	3	3	3	0	3	0	0	0	3	1	0	5	42
Rochester	0	4	3	7	0	4	3	0	3	4	0	0	0	0	0	3	0	3	34
CMU	5	5	2.5	5	2.5	2.5	2.5	2.5	2.5	0	2.5	0	0	0	2.5	2.5	0	5	42.5
UCLA	0	3	3	3	0	3	3	3	3	0	3	0	0	0	0	0	0	0	24
IIMA	2.25	4.5	6	6	6	3	6	6	4.5	4.5	4.5	0	3	3	0	6	0	0	65.25
IIMC	3	6	3	6	6	3	3	6	3	0	3	0	3	3	6	0	1.5	9	64.5
Typical school	3.00	2.81	3.61	4.68	2.83	3.04	3.18	3.54	3.27	0.00	2.36	0.00	0.00	0.00	0.00	1.79	0.00	4.56	38.66

Code: OR – Operations Research, Stat – Statistics, Fin – Finance, Acc – Accounting, Macro – Macroeconomics, Micro – Microeconomics, Mktg – Marketing, OB – Organisational Behaviour, Opns – Operations, MIS – Management Information Systems, Int Mgt – International Management, HRM – Human Resources Management, Law – Law, Mgt Com – Management Communications, Ethics – Ethics, Other Env – Other Environment, Others – Subjects not covered under any of the previous categories

For subjects under 'Other Environment' see Endnote 10.¹⁰ For subjects under 'Others' see Endnote 11.¹¹

Table 2(1): Differences between IIMB and Other Schools

	No of Credits	IIMB Common Credits	Other Comm Credits	IIMB Unique Credits	Other Unique Credits	3-D Differences from:			(2-D) Polar and Cartesian Representations			
						Common Credits	IIMB Unique Credits	Other Unique Credits	School Distance d	Angle θ	X Value	Y Value
IIMB	48	48	48	0	0	0	0	0	0.00	0	0.00	0.00
Harvard	45	28	36	20	9	-8	20	9	23.35	110	-8.00	21.93
Wharton	41	40	38	8	3	2	8	3	8.77	77	2.00	8.54
Stanford	44	37	39	11	5	-2	11	5	12.25	99	-2.00	12.08
Chicago	39	36	39	12	0	-3	12	0	12.37	104	-3.00	12.00
Kellog	27	31	27	17	0	4	17	0	17.46	77	4.00	17.00
MIT	30	32	27	16	3	5	16	3	17.03	73	5.00	16.28
Duke	30.5	33	28	15	2.5	5	15	2.5	16.01	72	5.00	15.21
Berkeley	24.5	34	23.5	14	1	10.5	14	1	17.53	53	10.50	14.04
Michigan	41	33	28	15	13	5	15	13	20.47	76	5.00	19.85
Columbia	34	34	34	14	0	0	14	0	14.00	90	0.00	14.00
Tuck	42	38	37	10	5	1	10	5	11.22	85	1.00	11.18
Rochester	34	26	31	22	3	-5	22	3	22.76	103	-5.00	22.20
CMU	42.5	38	37.5	10	5	0.5	10	5	11.19	87	0.50	11.18
UCLA	24	25	24	23	0	1	23	0	23.02	88	1.00	23.00
IIMA	65.25	44	65.25	4	0	-21.25	4	0	21.62	169	-21.25	4.00
IIMC	64.5	43	57	5	7.5	-14	5	7.5	16.65	147	-14.00	9.01
Typical	38.66	36	34.10	12	4.56	1.90	12	4.56	12.98	82	1.90	12.84

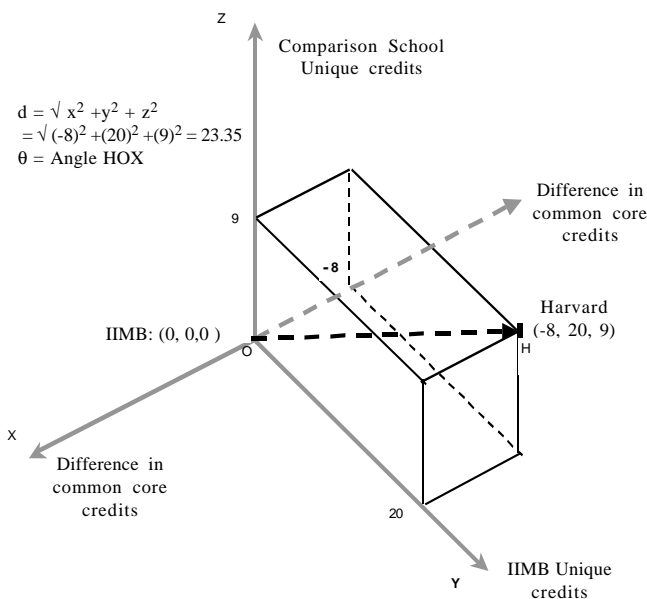
Table 2(2): Differences between IIMA and Other Schools

	No of Credits	IIMA Common Credits	Other Comm Credits	IIMA Unique Credits	Other Unique Credits	3-D Differences from:			(2-D) Polar and Cartesian Representations			
						Common Credits	IIMA Unique Credits	Other Unique Credits	School Distance d	Angle θ	X Value	Y Value
IIMB	48	65.25	44	0	4	21.25	0	4	21.62	10.66	21.25	4.00
Harvard	45	39	36	26.25	9	3.00	26.25	9	27.91	83.83	3.00	27.75
Wharton	41	57.75	38	7.5	3	19.75	7.5	3	21.34	22.24	19.75	8.08
Stanford	44	50.25	39	15	5	11.25	15	5	19.41	54.57	11.25	15.81
Chicago	39	46.5	36	18.75	3	10.50	18.75	3	21.70	61.06	10.50	18.99
Kellog	27	42.75	27	22.5	0	15.75	22.5	0	27.46	55.01	15.75	22.50
MIT	30	53.25	27	12	3	26.25	12	3	29.02	25.23	26.25	12.37
Duke	30.5	50.25	28	15	2.5	22.25	15	2.5	26.95	34.35	22.25	15.21
Berkeley	24.5	52.5	23.5	12.75	1	29.00	12.75	1	31.69	23.80	29.00	12.79
Michigan	41	49.5	28	15.75	13	21.50	15.75	13	29.65	43.53	21.50	20.42
Columbia	34	48.75	34	16.5	0	14.75	16.5	0	22.13	48.21	14.75	16.50
Tuck	42	54.75	37	10.5	5	17.75	10.5	5	21.22	33.23	17.75	11.63
Rochester	34	40.5	31	24.75	3	9.50	24.75	3	26.68	69.14	9.50	24.93
CMU	42.5	54.75	37.5	10.5	5	17.25	10.5	5	20.80	33.99	17.25	11.63
UCLA	24	40.5	24	24.75	0	16.50	24.75	0	29.75	56.31	16.50	24.75
IIMA	65.25	65.25	65.25	0	0	0.00	0	0	0.00	0.00	0.00	0.00
IIMC	64.5	54.75	54	10.5	10.5	0.75	10.5	10.5	14.87	87.11	0.75	14.85
Typical	38.66	54.75	34.10	10.5	4.56	20.65	10.5	4.56	23.61	29.00	20.65	11.45

Table 2(3): Differences between IIMC and Other Schools

	No of Credits	IIMC Common Credits	Other Comm Credits	IIMC Unique Credits	Other Unique Credits	3-D Differences from:			(2-D) Polar and Cartesian Representations			
						Common Credits	IIMC Unique Credits	Other Unique Credits	School Distance d	Angle θ	X Value	Y Value
IIMB	48	63	43	1.5	5	20	1.5	5	20.67	14.63	20.00	5.22
Harvard	45	37.5	37	27	8	0.50	27	8	28.16	88.98	0.50	28.16
Wharton	41	52.5	38	12	3	14.50	12	3	19.06	40.47	14.50	12.37
Stanford	44	40.5	37	24	7	3.50	24	7	25.24	82.03	3.50	25.00
Chicago	39	45	36	19.5	3	9.00	19.5	3	21.69	65.48	9.00	19.73
Kellog	27	36	27	28.5	0	9.00	28.5	0	29.89	72.47	9.00	28.50
MIT	30	36	24	28.5	6	12.00	28.5	6	31.50	67.61	12.00	29.12
Duke	30.5	40.5	26	24	4.5	14.50	24	4.5	28.40	59.30	14.50	24.42
Berkeley	24.5	40.5	23.5	24	1	17.00	24	1	29.43	54.71	17.00	24.02
Michigan	41	37.5	28	27	13	9.50	27	13	31.44	72.41	9.50	29.97
Columbia	34	42	34	22.5	0	8.00	22.5	0	23.88	70.43	8.00	22.50
Tuck	42	48	36	16.5	6	12.00	16.5	6	21.27	55.65	12.00	17.56
Rochester	34	24	24	40.5	10	0.00	40.5	10	41.72	90.00	0.00	41.72
CMU	42.5	48	35	16.5	7.5	13.00	16.5	7.5	22.30	54.35	13.00	18.12
UCLA	24	33	24	31.5	0	9.00	31.5	0	32.76	74.05	9.00	31.50
IIMA	65.25	54	54.75	10.5	10.5	-0.75	10.5	10.5	14.87	92.89	-0.75	14.85
IIMC	64.5	64.5	64.5	0	0	0.00	0	0	0.00	0.00	0.00	0.00
Typical	38.66	42.00	32.32	22.50	6.35	9.68	22.50	6.35	25.31	67.50	9.68	23.38

Figure1: 3-D Representation of Overall Differences between IIMB and Comparison School



and 2(3) are similar tables of differences for IIMA and IIMC constructed out of the data presented in Table 1.

We can use the data available in Tables 2(1), 2(2) and 2(3) to position the various schools with respect to IIMB, IIMA and IIMC in the curriculum space. Ideally a three-dimensional plot of school position with respect to each of the IIMs based on the data in Tables 2(1), 2(2) and 2(3) would represent the differences between schools. Figure 1 is a plot of the differences between Harvard and IIMB based on the data of Table 2(1). We can see that Harvard's position in terms of the differences between it and IIMB in the course-credit space can be represented by the coordinates -8, 20, 9 corresponding to the three dimensions of 'differences in common course credits', 'differences arising due to IIMB unique course credits' and 'differences arising due to comparison school (Harvard) unique course credits'. The magnitude and direction of the vector OH is a measure of the differences between IIMB and Harvard.

The problem with this three-dimensional representation is that when the positions of the other schools are added it becomes very difficult to visualise the relative position of the schools with respect to IIMB. We may be able to provide a more intuitive and easy understanding if the three-dimensional information can be converted into two dimensions. Since the three axes that measure differences between the various schools and the Indian school are mutually orthogonal, we can think of a two-dimensional visualisation of the position of schools.

In the representation we have chosen, the two dimensions of 'differences arising due to IIMB unique course credits' (or IIMA unique or IIMC unique, as the case may be) and 'differences arising due to comparison school unique course credits' are collapsed into a single dimension using simple coordinate geometry. This dimension is represented on the Y-axis as 'differences arising due to unique course credits'. The X-axis of our chosen representation continues to be defined as the 'differences between IIMB (or IIMA or IIMC) and the comparison school in course credits that are common to both schools'. This 2-D representation can either be done using polar coordinate system or a Cartesian coordinate system.¹² Further discussions are based on the 2-D Cartesian system that is easier to follow and visualise.

The X and Y-axis values are also shown in Tables 2(1), 2(2) and 2(3) for the three IIMs. Since the detail for all three dimensions are available in Table 2, the Y-axis of our representation can always be resolved into 'the IIMB (or IIMA or IIMC) unique course credits' and 'comparison school unique course credits'.

Panels (1), (2) and (3) of Chart 1 show the relative positions of the various schools with respect to the three Indian schools based on the above X and Y axes representations for IIMB, IIMA and IIMC respectively. If a comparison school's position is close to the X-axis (i.e., the comparison school is located at a low Y-coordinate value), it is an indication that there is not too much difference between the schools arising from the unique part of their curriculums. In other words, both the comparison school and the reference school cover nearly the same subject areas. The schools may still differ in terms of the credits offered in these common subjects – this difference is captured in the X coordinate value.

As a comparison schools position moves in the direction of the Y axis, the differences between any one of the IIMs and the comparison school is more and more driven by the 'differences in unique course credits' which can be broken down into the sub-components of the 'IIMB or IIMA or IIMC unique course credits' and the 'comparison school unique course credits', the details of which are available in Tables 2(1), 2(2) and 2(3) for IIMB, IIMA and IIMC respectively.

How Different are IIMs from Each Other?

Panel (1) of Chart 1 shows the differences between the various schools and IIMB and Panel (2) of Chart 1 shows the differences between various schools and IIMA. IIMB and IIMA are positioned at different locations in a straight line almost parallel to and very close to the X axis. This means that their subject coverages are practically identical though the credits they offer in these subjects are different.

Gong back from Panel (1) to Table 1 we see that IIMB offers 16 subjects in its core. All 14 of the IIMA core offerings are also offered by IIMB.¹³ There are two subjects with their corresponding credits that distinguish IIMB from IIMA. These are the IIMB subjects easily identifiable from our database as the course on 'market research' grouped in the category 'others' and 'indian society' grouped in the category 'other environment'. We can also easily see that IIMA seems to offer more credits (65.25) in the common subjects than IIMB (44 credits).

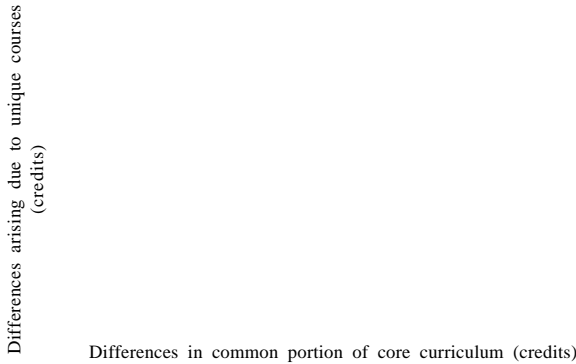
In the same way from Panel (1) and Panel (3) we can see that subject coverage between IIMB and IIMC appears to be very similar though not as similar as the subject offerings between IIMB and IIMA. IIMC offers 17 courses – 14 of which are common with IIMB. IIMB offers two subjects that IIMC does not offer – 'management information systems and technology' and 'management communications'. IIMC offers three subjects not offered by IIMB – 'ethics', 'management game' and 'data processing'. IIMC also offers more credits (57 credits) than IIMB (43 credits) in subjects that are common to both IIMC and IIMB.

From Panel (2) and Panel (3) of Chart 1 we can see that IIMA and IIMC seem to have some differences in subject coverage as seen in the shift in their positions away from the X-axis. When we look at the differences in core subject offerings between IIMA and IIMC (Table 1), 13 subjects are common to IIMA and IIMC. IIMA offers two subjects 'management information systems' and 'management communications' not offered by IIMC. IIMC offers 4

Chart 1

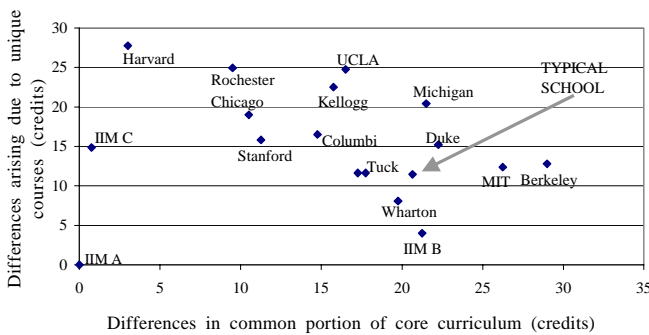
Panel 1

Credit based positioning of schools (wrt IIMB)



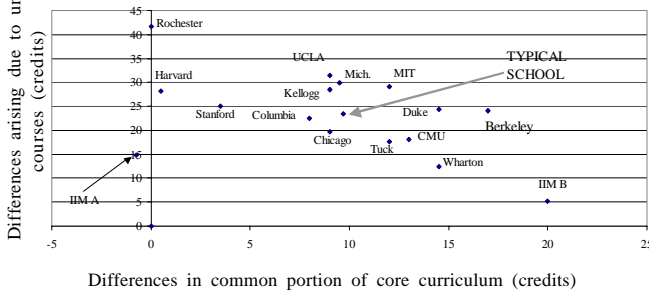
Panel 2

Credit based positioning of schools (wrt IIMA)



Panel 3

Credit based positioning of schools (wrt IIMA)



subjects not offered by IIMA – ‘ethics’, ‘management game’, ‘research for marketing decisions’ and ‘data processing’. In spite of these differences in subject offerings IIMA and IIMC appear to be closer to each other than to IIMB in the subject credit space. The IIMA – IIMC distance is 14.87 whereas the IIMB – IIMA and the IIMB – IIMC distances are 21.62 and 20.67 course-credits respectively from Tables 2(1), 2(2) and 2(3).

We can conclude that the difference between IIMB and IIMA is largely driven by the extra credits that IIMA offers in almost the same set of subjects. A combination of more credits in common subjects and ‘credits for IIMC unique courses’ seems to be responsible for the difference between IIMB and IIMC. While there are differences between IIMA and IIMC in subject offerings they appear to be closer to each other in the course-credit space than to IIMB. We can see that both IIMA and IIMC offer more credits in the subjects they have in common with IIMB.

Since they share most of the subjects, the differences between IIMB, IIMA and IIMC are largely due to the number of credits offered in their subject offerings.

Of course the more important issue that we want to address is not how the IIMs compare with each other but rather how they compare with the 14 benchmark schools. If there are differences, are the reasons for the differences between the IIMs and the 14 benchmark schools due to a set of India centric factors or are they due to an inability to change? What inferences can we draw from our analyses about the approaches of the IIMs to management education? These are logical questions, which we will try to answer in the following sections.

IIM Positions with Respect to Benchmark Schools

From Panel (1) and Table 2(1) we can see that IIMB is closest to Wharton and fairly close to CMU, Tuck, Stanford Chicago and Columbia. IIMB is a little bit farther away from MIT, Duke, Kellogg and Berkeley. It is, of course, much farther away from the other schools – UCLA, Rochester, Harvard and Michigan. For IIMA, we can see from Panel (2) that Stanford is the closest school. However Stanford seems to be closer to IIMB than to IIMA in terms of distance as seen in Tables 2(1) and 2(2). CMU, Tuck, Wharton Chicago and Columbia are the schools that are next in terms of their distance from IIMA with all of them being farther away from IIMA than from IIMB. The rest of the schools are still farther away from IIMA. We can see from Panel (3) and Table 2(3) that Wharton is the closest school to IIMC. The pattern of positions of the 14 benchmark schools from IIMC is very similar to IIMB and IIMA though of course the 14 benchmark schools are even farther away from IIMC than they are from IIMB or IIMA. We can conclude from this analysis that the 14 benchmark schools differ from all the IIMs. They are much closer to IIMB than to IIMA or IIMC.

Can IIMs Reach Positions of Top Schools?

To provide an understanding of the differences between the IIMs and the 14 benchmark schools let us try to understand what changes the IIMs need to make in terms of course-credit coverage to match the top schools. We will use Harvard and Wharton as examples.

IIMB offers 28 credits as compared to 36 credits for the eight subjects it has in common with Harvard. IIMA shares the same eight common subjects with Harvard but offers 39 credits for them. IIMC shares one more common course with Harvard (Ethics), causing nine common courses. It offers 37.5 credits for the nine common courses it shares with Harvard as against the 37 credits offered by Harvard for the nine common courses. There are eight courses totalling 20 credits offered by IIMB and not offered by Harvard. These are OR, statistics, microeconomics, management information systems (MIS), human resources management (HRM), law, management communications and market research (MR). Harvard offers three unique subjects totalling nine credits not offered by IIMB. These are entrepreneurship, management, negotiations and ethics. For IIMB to match Harvard it has to drop the eight subjects and 20 credits that it is offering and Harvard is not offering, increase the number of credits in subjects it has in common with Harvard and add the subjects that are unique to Harvard with their corresponding

credits. IIMA will also have to do something very similar except that it has one course less to drop. It almost matches Harvard in credits for the common subjects but still has to add on the three subjects and corresponding credits for the three Harvard courses it is not offering. Though IIMC has nine common subjects with Harvard it also offers one more subject not offered by Harvard. It will also have to drop eight subjects and their corresponding credits, and add the two subjects and their corresponding credits that Harvard is not offering. All the IIMs will have to drop between seven and eight subjects and add from two to three subjects along with their corresponding credits for them to match Harvard.

It is also obvious that the reason why Harvard occupies such a premier international position in management education is because it is able to integrate the seven to eight subjects that it is not offering in comparison to the IIMs with other subjects to provide a more relevant business focused education.¹⁴ Matching Harvard is therefore not as simple as dropping and adding subjects and credits. Internal processes that determine delivery in an integrated way is also an important differentiator. We can see that there is a big gap between the IIMs and Harvard that may be difficult to bridge if Harvard is the chosen benchmark.

How do the IIMs compare with Wharton? Wharton offers 15 subjects and a total of 41 credits in its core curriculum. Both IIMB and IIMA share the same 13 common subjects with Wharton with IIMB offering 40 credits and IIMA 57.75 credits respectively as against the Wharton offering of 38 credits for the common subjects. The IIMB unique subjects are MIS, HRM and market research (MR) totalling eight credits. IIMA unique subjects are MIS and HRM totalling 7.5 credits. The Wharton unique subjects as compared to both IIMB and IIMA are International Management and Ethics. We can see that by dropping the MIS, HRM and MR courses, slightly reducing the credits in subjects it has in common with Wharton and by adding subjects with corresponding credits in international management and ethics, IIMB can match Wharton in terms of core curriculum content.

IIMA can match the Wharton curriculum by dropping the MIS and HRM subjects, adding subjects with corresponding credits in ethics and international management and by decreasing the credits in the 13 common subjects it shares with Wharton. IIMC has a different set of 13 subjects in common with Wharton as compared to IIMB and IIMA. Like Wharton it does not offer MIS and like Wharton it offers Ethics. It offers four subjects not offered by Wharton. These are HRM, MR, Management Game, and Data Processing. Wharton offers two subjects International Management and Management Communications not offered by IIMC. By dropping HRM, MR, Management Game and Data Processing totalling 12 credits, adding International Management and Management Communications totalling three credits and by reducing the credits in its 13 common courses from 52.5 to 38 credits IIMC can match Wharton.

We can conclude from the above analyses that the three IIMs are much closer to Wharton than they are to Harvard in terms of course-credits. The reason for the larger separation of both IIMA and IIMC from Wharton as compared to IIMB is largely due to the larger number of credits that they offer in the common courses they share with Wharton. This implies that Wharton is able to package as much as the IIMs in fewer credit hours.¹⁵ IIMB is much closer to Wharton because it

delivers in 40 credits the same 13 courses that Wharton delivers in 38 credits. The other driver of the differences seems to be the IIM unique courses. These are: HRM common to all three IIMs, MIS common to IIMB and IIMA, MR common to IIMB and IIMC, Data Processing and Management Game offered only by IIMC. There is also a small component of the difference that can be ascribed to the Wharton unique subject offering on international management. The larger credit offerings of the IIMs in the common subjects and the IIM unique course credits seem to account for the bulk of the difference between the IIMs and Wharton. The gap with Wharton appears easier to bridge for all the IIMs than the gap with Harvard. It is of course much easier for IIMB to bridge this gap with Wharton than IIMA or IIMC.

These two examples represent two possible extremes. A better representation of the difference would be to benchmark the IIMs against a typical school. The typical school as defined earlier offers all the subjects offered by at least 50 per cent of the 14 benchmark schools. The credits for each of these subjects offered by the typical school are the average credits offered in that subject by the benchmark schools offering that particular subject. Table 3 provides details of the differences between the three IIMs and a typical school in terms of our three coordinates of the course-credit space.

We see that IIMB is much closer to the typical school than IIMA and IIMC (a distance of 12.98 course-credits as against 23.61 for IIMA and 25.31 for IIMC). In the case of IIMB the difference between it and the typical school is largely driven by the IIMB unique course-credits. For IIMA the difference between it and the typical school is driven largely by the extra credits it offers in the common core courses. A significant part of the difference is also accounted by the IIMA unique course-credits. For IIMC the major driver of the difference between it and the typical school seems to be the IIMC unique subject credits. We can also see that across all the three IIMs a set of common IIM

Table 3: Typical School and IIMs

School	Differences Arising Due to		Distance 'd' of Typical School from the IIMs	The IIM Unique Courses that Account for the Difference	
	Common Course Credits	School IIM Unique Credits			Account Typical School Unique Course Credits
IIMB	1.90	12	4.56	12.98	MIS, HRM, Law, Other Environment (Indian Society) and MR are the IIMB unique courses
IIMA	20.65	10.5	4.56	23.61	MIS, HRM, Law, are the IIMA unique courses
IIMC	9.68	22.50	6.35	25.31	HRM, Law, MR Other Environment (Business History), Data Processing, Management Game and Ethics are the IIMC unique courses

Notes: (1) The typical school has 11 subjects in common with IIMB and IIMA and 10 subjects in common with IIMC as can be derived from Table 1. (2) The differences are derived from Table 2. The IIM unique subject offerings are identifiable from Table 1. The distance 'd' of the typical school from IIMB is equal to (square root of) $\sqrt{(1.90^2 + 12^2 + 4.56^2)} = 12.98$ course-credits.

Figure 2: Frequency of Core Course Offering across 14 Benchmarking Schools

Notes: * Indicates IIM core courses offered by less than 25 per cent of the benchmarked schools .

** Indicates courses offered by the IIMs under category 'others'.

unique course-credits seem to account for a significant part of the differences. The subjects responsible for these are MIS, HRM, law, MR, Indian society, business history, management game (IIMC) and data processing (IIMC). If the IIMs can drop these course-credits they could easily come closer to the top schools in terms of core curriculum content.

What Could Be the Reasons for Positions of IIMs?

The larger breadth of subject offerings and the larger number of credits per course offered at least at IIMA and IIMC and to a lesser extent at IIMB seem to be responsible for the positions we see in Chart 1 for the three IIMs. A priori one would expect the IIMs to be different since the Indian business environment is different from the business environment in the developed economies and the core curricula of Indian management schools should reflect these differences.

An alternative view could be that the reason why IIMs are so different is not due to any uniqueness arising out of their common Indian location but because they have not made the changes in the curricula that are required to reflect contemporary changes in management knowledge, practice and pedagogy. According to this argument the monopoly power of the IIM brand and the quality of the students coming through Common Admission Test are the major reason for the success of the IIMs. The success brought about by this combination should not be interpreted as equivalent to 'state of art India-Oriented management education'.

An interesting outcome of our analysis is that we find that IIMB is closer to Harvard than IIMA. It is also closer to MIT than IIMC. Since IIMA was originally set up with the help of Harvard and IIMC was set up with the help of MIT this implies one of two things. One interpretation could be that both the IIMA and IIMC approaches to curriculum change have diverged significantly away from that of their original collaborators because of their India-oriented subject offerings. The alternative view could be that while Harvard and MIT have changed their curricula to keep pace with changes in knowledge and market needs the IIMs have not done so.

Somehow IIMB seems to have changed sufficiently to place it closer to the benchmark schools. This change, largely a

reduction in credits at IIMB, can be directly related to the work of an earlier curriculum review committee that had recommended a drastic reduction in the core curriculum credits.¹⁶ Though the breadth of coverage was not significantly reduced as a result of this review, just the reduction in the number of credits and the consequent marginal change in pedagogy and design of the core curricula has moved IIMB closer to the benchmarked schools. IIMA and IIMC have apparently not made this shift and the implication is that they are farther away from the set of benchmarked schools. This would reinforce the argument that the IIM monopoly and brand reinforced by the CAT selection process rather than a conscious student-oriented integrated content delivery is largely responsible for the differences between the IIMs and the benchmark schools. Based on our data and analyses can we shed some further light on these issues?

Figure 2 provides details on the percentage of the 14 benchmark schools offering a particular subject in their core offerings. The subjects are ranked in decreasing order. We can see from Figure 2 that the subjects Law, HRM, International Management, MIS and a number of courses under other environment are taught by less than 30 per cent of the schools.

Of course, some of the differences between the IIMs and the 14 schools arise from the courses under the subject category 'others'. Offerings under 'others' include 'entrepreneurship management', 'negotiations', 'ethics' (Harvard), 'computer skills' (Duke), 'management game' (CMU), 'integrated projects with industry' (Tuck, Michigan), 'negotiations and conflict management (MIT) and 'economic theory of organisations' (Rochester). 'Market research' offered by IIMB and IIMC, 'management game' and 'data processing' offered by IIMC are IIM unique courses in the subject category 'others'. While 'management game' offered by CMU and 'computer skills' offered by Duke may be similar the 'management game' and 'data processing' courses at IIMC they do not reflect any general trends among the other 13 benchmarked schools. 'Market research' is not offered as a part of the core subjects in any of the 14 benchmarked schools.

We can conclude from the above that 'law', 'HRM', 'Indian society', 'business history', 'MIS' and 'market research' are the subjects that are unique to IIMs. These subject offerings and their corresponding credits are responsible for a lot of the differences between the IIMs and the 14 benchmark schools.

The 14 benchmark schools also appear to deliver more integrated content in fewer credits than the IIMs. This is apparently done through a continuous appraisal and reappraisal of the relevance and scope of the core content and by making sure that content delivery transcends narrow discipline domains of management knowledge.

What inferences can we make about the IIMs and their propensity to make similar changes? Let us look at each one of the IIM unique offerings. The course on 'market research' is offered as a part of the core curricula by both by IIMB and IIMC. Anecdotal evidence indicates that this was originally introduced into the core curriculum a long time ago as a response to companies offering market research projects to the first year students during their summer internship. In spite of changes in the kind of projects offered during the internship this practice of retaining 'market research' in the core still continues. In all the 14 benchmarked schools this course (if offered) is offered only as an elective. Clearly the IIMs have not changed at all in spite of

many reviews of their curricula by a string of curriculum review committees.

The other course that is offered by all the three IIMs but only in two out of 14 benchmarked schools is HRM. In Segev's 1994 study (our benchmark set of 14 is a sub-set of the Segev set of 25 business schools) of the 14 schools in our benchmark Chicago, MIT and UCLA are listed as offering HRM courses. In 2002 in our set of 14 schools only two of the 14 schools MIT and Stanford offer HRM in their core curriculum.

Does this mean that managing human resources are no longer critical in a business context? Obviously this is not so. All the IIMs offer three courses that span both the 'organisational behaviour (OB)' and 'HRM' functions. Two of these courses cover the OB part and a separate HRM course looks at managing people at work. Between five to six credits are allotted to the OB part and about three credits to the HRM part making a total of eight to nine credits. By contrast most of the 14 benchmark schools integrate the OB domain knowledge into themes that look at how this knowledge can be used to manage human resources. The approach brings in a strategic perspective for looking at human resources in organisations. By integrating the various domains of management knowledge such as strategy and economics with organisational behaviour the entire perspective of managing human resources (people at work) is presented in a different way making the content more relevant and meaningful to the business context. This content is covered typically in three to four credits as compared to the eight to nine credits offered by the IIMs. It is clear from this that just increasing credits does not necessarily translate into better or deeper content. Only when different domains of knowledge are brought together in an integrated way can knowledge related to the business domain be transferred in a useful and relevant way.¹⁷

How easy or difficult is it for the IIMs to match the capabilities of the 14 benchmark schools? Let us look at the MIS course offered in benchmark schools and the IIMs. MIS is also offered by two of the three IIMs, IIMB and IIMA. IIMC offers a core course on Data Processing. Only three schools offered something like the MIS course in 2002 among the 14 benchmark schools. They are Stanford, MIT and Rochester. Segev's compilation of core course offerings made in 1994 lists eight schools out of our 14 schools as offering MIS courses in 1994. This would indicate that between 1994 and 2002 a large number of schools dropped their MIS course offerings.

When we look at the details of the MIS course offerings of the Stanford, MIT and Rochester in 2002 there are substantial differences between their courses and the courses offered at IIMB and IIMA. The Stanford course 'managing in an information age' actually looks at the impact of IT on a business. It has a 'strategy' or 'operations' and not an 'information system' focus. The Rochester course looks at a combination of network economics and the impact of IT on operations. The MIT course combines some technology with operations issues. All of them combine IT with operations and strategy. None of them resemble the traditional MIS courses offered by the IIMs.

In a way this is not surprising since the role of computers in a business context has changed substantially in the last 10 to 15 years. From being a limited resource requiring specialised knowledge and skill, computers have become ubiquitous commodities that can be used by ordinary people. As a consequence the centralised computer departments that were key to running

many business operations have disappeared and the knowledge and skills associated with the use of computers has migrated to individual functions like marketing, operations, accounting, etc. In response to these changes the traditional MIS courses have merged with functional courses though many MIS departments remain.

Business schools abroad also seem to pay increasing attention towards the implications of IT and the Internet on the business. Many of the skill-based course offerings like courses on 'Data Processing' are covered in the form of tutorials or workshops in many of the 14 benchmark schools and do not constitute a part of the core credit curricula.¹⁸ This substantiates the point we have been making earlier that the IIM core curricula are relatively stagnant and unchanging in comparison to the 'best' schools.

IIMB offers a course on 'Indian society' and IIMC offers a course on 'business history' both of which fall in the subject category 'other environment'. IIMA also offers a course on Indian society but since it is a non-credit course it is not reflected in Table 1. Among the 14 benchmark schools under the subject category 'other environment' Harvard offers a course called 'business, government and the international environment'. It appears to be a fairly unique course in that it integrates the societal and legal aspects in the context of a firm operating in the international business environment. In the same subject category 'other environment' Tuck offers a course that focuses on the 'technology environment' and its implications for business and Chicago offers a course entitled 'organisations and markets'. These are integrated approaches that combine knowledge from different disciplines into content that is specifically targeted at the business domain.

By contrast though the IIM courses on 'Indian society', 'business history and 'law' do cover aspects that appear to be India centric they do so in a diffuse way. These courses appear to be discipline anchored islands rather than integrated content spanning disciplines that is oriented towards business. So while these courses may be 'India centric' and could in principle serve as a major differentiator of the top Indian schools, it does appear that content, delivery and integration of 'discipline islands' towards a business focus could do with significant improvements.¹⁹ Unless this happens the IIMs will not be able to leverage their locational advantage into an India brand.

What Inferences Can We Make from This Benchmarking Exercise and Analysis?

There is no doubt that the students that get into the IIMs are among the best if not the best in the world. Since in general all the IIMs require more credits in the core and the electives for graduation one can very easily conclude that the IIMs are producing business school graduates that are comparable if not better than the graduates of the best benchmark schools.

Our analysis of comparing the IIMs against some of the top schools in the world indicates that this is not so. The first problem with the core curricula of the IIMs is that they have not been able to keep pace with contemporary changes in offerings by dropping and adding subjects based on new knowledge and the needs of an increasingly globalised and interconnected world. This is seen in the large number of IIM unique course credits that are not offered by the top business schools. Most of these subjects like 'market research' or MIS or 'data processing' or

Household Savings and Investment Behaviour in India

The study is a novel one of its kind. It has been undertaken by the National Council of Applied Economic Research (NCAER) in collaboration with the EPW Research Foundation. The study is in two parts. Part I consists of benchmark estimates of household savings in India for 1994-95 produced by the nation-wide field survey undertaken by the NCAER under a wide-ranging study on the Micro Impacts of Macroeconomic and Adjustment Policies (MIMAP), which was sponsored by a Canadian aid agency, International Development Research Centre (IDRC), Ottawa. Part II addresses the subject of saving in a broader context with discerning lessons for policy.

Part I of the study attempts a detailed analysis of household savings, their distribution by rural and urban households and by occupational categories; the profiles of saver and non-saver groups and the disaggregations of household savings by male-female categories, by educational level, by caste groups, and by poor and non-poor households, are unique to the MIMAP survey.

Part II of the volume has sought to supplement the survey results by two substantive additional contributions: a fairly comprehensive survey of the literature on saving including a succinct picture of inter-country experiences; and a detailed review of India's saving performance over the past five decades with a critical assessment of the trends and determinants.

This publication is priced per copy (inclusive of postage) thus :

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'management game' should not be a part of the core curriculum any longer.²⁰ The IIMs continue to offer them unmindful of the fact that the top schools have long ago moved away from offering them as a part of their core.

Perhaps it makes sense to examine the evolution of individual institutions such as the IIMs from an evolutionary perspective, given their goals and context. In the 1960s and 1970s, Indian management schools were searching for the Indian requirements. Prior to 1991, management schools were concerned about modifying the curriculum of a typical US business school to suit Indian conditions, even in disciplines such as economics or industrial relations. However, the post-1991 new environment demands that the schools shift their focus from a purely Indo-centric perspective to a global perspective where the all sectors – agriculture, industry, and services – are viewed as part of a global economy. While the earlier paradigm required a focus on disciplines and required close cooperation with the planners and administrators, the new environment requires specialisation and close cooperation with the innovating enterprises and managers who are making an effort to reach world class performance.

The evidence presented in this study indicates that the IIMs are facing difficulty in adjusting to the new paradigm. Even in the part of curriculum that is common with the typical US business school, the transition from a functional perspective to an integrated strategic perspective, which has been the hallmark of changes in US business curricula over the last 30 years, is yet to be achieved. Curriculum change in the IIMs seems to be based on feasible incremental change rather than on new knowledge, the needs of the students or the demands of an increasingly globalised and inter-connected business world.

An additional point to note is that although the IIMs offer a larger number of credits in the core as compared to the benchmarked schools this is not necessarily a plus point for them. More credits are not a substitute for integrated course content and delivery. We see this in the differences between the IIMs and the 14 benchmark schools in the way the OB/HRM courses are taught. An integrated three to four credit OB/HRM course taught from a strategic perspective as offered at Tuck or Wharton may provide much more value to the student than the three OB/HRM courses with eight to nine credits taught at IIMs. Even in subjects that are India specific such as 'Indian society' or 'Indian business history' or 'law' we can see that the IIMs are not trying to provide a tighter, more integrated and relevant offering.

One possible reason for the stagnation in the curricula of the IIMs could be that over time they have effectively become disseminators of knowledge rather than creators of knowledge. Though the teaching in the IIMs is of a high standard, their internal systems do not seem to be oriented sufficiently towards the creation of knowledge. As a consequence there is no internal pressure to bring in new research and knowledge into the curriculum. By contrast all the top benchmarked schools emphasise research and the creation of new knowledge. Some of this knowledge finds its way via the electives into the core curriculum.

One illustration of this is the way in which the Stanford course on HRM found a place in the core. In 1994 Stanford did not have a HRM course in its core. However a group of faculty from different areas that included sociology, economics, organisational behaviour, strategic management and accounting got together and decided that there were major opportunities for original

knowledge creation that cut across narrow discipline boundaries. The research that came out of this initiative led directly to the offering of an elective in the MBA programme. The elective was so popular with the students that the school moved it to the core [Zich 2000]. Such initiatives may not be easy in the IIMs largely because of their excessive focus on knowledge dissemination rather than knowledge creation.

Internal systems and processes that rigidify out of routine teaching activities may be another factor that come in the way of IIMs achieving integration. If this is combined with monopoly power and a high brand value, incentives to change are further reduced. So even if the IIMs get the best students they may not produce the best management graduates. Clearly a few of their students would achieve prominence and recognition in the world of business. This would however come about not because of the value added by the IIMs but due to the innate capabilities and quality of the raw materials.

By dropping some subjects and by reducing the number of credits in the offered subjects the IIMs can easily come close to matching the top schools in core curricula content. If these steps can be coupled with a greater focus on integration and knowledge creation along with concomitant changes in their internal systems and processes, the IIMs can match the best business schools in the world. Such an approach could easily transform the IIMs into global powerhouses for management education.

Can IIMs Make This Transition?

The Indian Institutes of Management are constrained on several fronts. Some key factors are the limited tenure of leadership (e.g. the director's term), the archaic rules and regulations of government employment conditions, and the shortage of research intensive faculty. These factors tend to exacerbate the difficulty in giving incentives for 'good' performance. Over time, 'good' performance tends to be defined with respect to the immediate short-term goals of the institute rather than some notion of a model employer. In addition, board memberships are either for government control or patronage in the case of independent governors. Are these appropriate for charting out a long-term goal and implementation in a highly competitive and difficult environment? For the IIMs to make a successful transition, the government should seriously consider ways of facilitating an environment that encourages them to take leadership positions in the world of management education. After all, the IIMs are the beacons for the rest of management schools in India. ■■■

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Notes

[The authors would like to thank their fellow committee members Janat Shah, Deepak Sinha, Rupa Chanda and Vasanthi Srinivasan for critical comments and inputs. Comments and views of other faculty colleagues at various stages of this research are gratefully acknowledged. Special thanks are due to K R S Murthy for his invaluable comments and K P Basvarajappa of IIMB who helped with the collation and analysis of the data. The views expressed here are the authors own and do not necessarily represent the views of the Indian Institute of Management Bangalore, period.]

- 1 Complexity arises due to the following: (i) the blurring of the boundaries between causes and effects and the operation of multiple positive and

negative feedback loops, (ii) the difficulty in separating out the essential elements of 'the problem' from the noise in the system. Additional complexity is introduced into the curriculum by the need to factor in the human dimension both at the individual and organisational level. Most management schools also try to integrate the individual aspirations and goals of their students into the curricula by providing inputs in the softer skills like leadership, team building and negotiations. Pressures from key global recruiters who want 'instant ready to work' global managers capable of functioning anywhere in the world and the ranking of business schools by the media bring in other dimensions that have an impact on an already diverse and intense work load and curriculum. Management school curricula reflect this complexity in the range of subjects and disciplines they cover and in the way these subjects are taught.

- 2 Learning in such situations therefore becomes closely coupled with inferences drawn from common patterns observed across a number of real life illustrations. This is the major reason why the use of cases and the case method has become a common feature in the curricula of top business schools. These pattern recognition or synthesis skills have to be coupled with hard quantitative understanding of the core disciplines of management like statistics, finance and economics.
- 3 Schools also specify a minimum number of credits for graduation (based on the number of class contact hours). Some Indian schools spillover core offerings into the 2nd year of the programme where they are offered along with electives.
- 4 Gerhard Casper the President of Stanford University voices these concerns in an open letter written to James Fallows, Editor, *US News and World Report* a periodical that publishes one of the most well known rankings of business schools. The letter written on September 23, 1996 seems to have had very little impact on ranking methodologies.
- 5 Though the approach is somewhat generic and can be applied to a number of situations covering the business domain, we believe that the issues of comparing and benchmarking business schools in India is sufficiently important for us to share these findings with a larger audience.
- 6 While the method is applicable to both the core and elective curriculum, in this study we confine our discussions to the core part of the curricula of business schools.
- 7 In related earlier work, Segev (1999) has tried to capture strategic positions of schools in terms of core and elective curricula using the various subjects offered by the schools as the key differentiator. His methodology and the resultant clustering of schools, while mathematically elegant, cannot be easily understood or interpreted by people wanting to implement curriculum change.
- 8 A possibility that is irrelevant is with respect to courses that are not offered by either the Indian school or the comparison school. Obviously these will not contribute to either similarities or differences if we are comparing an Indian school like IIMB (or IIMA or IIMC) with any other benchmark school.
- 9 The web addresses of the various schools are given at the end of the references.
- 10 'Other environment' includes 'Indian society' offered at IIMB, 'business, government and the international environment' at Harvard, 'business history' and 'Indian society' courses at IIMC, 'organisations and markets' at Chicago, 'managerial environment' at CMU and 'strategic analysis of technology systems' at Tuck. IIMA offers a non-credit course on Indian society that is not listed in Table 1.
- 11 The category 'others' include 'market research' at IIMB and IIMC, 'data processing' at IIMC, 'computer skills' at Duke, 'management game' at IIMC and CMU, 'multidisciplinary action project' at Michigan, 'economic theory of organisations' at Rochester, 'leadership forum' at Tuck, 'negotiations and conflict management' at MIT, 'entrepreneurship management' and 'negotiations courses' at Harvard.
- 12 From the geometry shown in Figure 1 we can easily prove that if 'd' is the magnitude of the vector OH (differences in course credits between any one of the IIMs and a comparison school estimated as $\sqrt{x^2 + y^2 + z^2}$) and θ is the angle HOX, 'd cos θ ' = differences in common course credits and 'd sin θ ' = differences between schools arising from school unique course credits. 'd cos θ ' and 'd sin θ ' are the X and Y co-ordinates of our simpler two dimensional plot. 'd sin θ ' can be further resolved into

an IIMB (or IIMA or IIMC) unique course credit number and a comparison school course credit number. These computations are shown in Tables 2(1), 2(2) and 2(3) for the three IIMs and the corresponding X Y plots for the 3 IIMs are shown in Panel (1), Panel (2) and Panel (3) of Chart 1.

- 13 IIMA also offers a course on Indian society. However since this is a non-credit course it is not reflected in Table 1. If we take this into account IIMB and IIMA have 15 courses in common.
- 14 This view is based on looking at the course content of some of the courses and its associated reading material.
- 15 One alternate interpretation of the larger credits on offer at the IIMs is that it shows greater depth. A detailed look at the course content, pedagogy, cases and approach of the benchmarked schools carried out by faculty colleagues on the review committee seems to suggest that the larger number of credits offered by the IIMs do not necessarily reflect greater depth.
- 16 Based on the recommendations of an earlier PGP curriculum review committee IIMB had reduced the number of credits offered in the core from 56 to the current 48 credits.
- 17 Details of the OB/HRM curricula were studied by Vasanthi Srinivasan a member of the curriculum review committee. These conclusions are based on her inputs.
- 18 Even discussions of these possibilities may not be taking place in spite of the work of several curriculum review committees. One reason for this could be resistance to change from discipline areas and faculty.
- 19 Based on inputs provided by Rupa Chanda member of the curriculum review committee.
- 20 Deepak Sinha a member of the curriculum review committee looking at strategy courses feels that some third generation management games may be useful to include as a part of the core.

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