DEFINITION OF HANDICAP

Collins Dictionary: In horse racing a handicap is a race in which some competitors are given a disadvantage of extra weight in an attempt to give everyone an equal chance of winning.

MRA Rule: “Handicap” is a race in which the weights to be carried by the horses entered are adjusted by the handicapper for the purpose of equalising their chances of winning after the time limited for entering.

The operative word is EQUALISE.

HANDICAPPING - Art or Science?

“A bit of both - It can never be an exact science because OPINION as well as FACT is involved.”

HANDICAPPING IN SINGAPORE

The ever-increasing exposure of Singapore to the international world of thoroughbred horse racing has made it important to have a handicap system that is readily recognized by the global community.

With this objective in mind 'merit handicapping' has been implemented as the method of rating horses in Singapore since April 2001.
Whilst a system of handicapping on merit provides for competitive racing domestically the additional benefit is the accurate assessment of the racing standard of Singapore's horses relative to that of the global thoroughbred herd.

**WHAT IS HANDICAPPING REALLY?**

As the name suggests, handicapping on merit means that a horse's allocated weight in a race will have been earned by the measurement of his previous performances. This means that the revealed ability of the animal is the primary basis for determining his handicap rating.

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**If we take a human example,**

Assume Man A runs against Man B over a distance of 100 metres.

Both have a good start and Man A beats Man B by 10 metres.

Next Man B runs against Man C and wins by 10 metres.

So when A and C line up the result should be predictable:

On available evidence A should beat C by 20 metres, all other things being equal.

Now if A carries some weight and races against B - there is a dead heat.

To get the same result when A meets C, it requires A to carry twice the weight.

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**MERIT THEORY**

If A beats B by 10 metres, and B beats C by 5 metres

Then what would the “handicap” be?

If it is known that 5 kg stops the average runner by 5 metres then on ‘MERIT’, the Weights in a merit handicap would look something like:

- A carries 15 kg
- B carries 5 kg
- C carries nothing

*Predicting who wins is not straightforward - the runners are now “COMPETITIVE”*
VARIABLES

To complicate the example further the distance can be increased from 100 metres to 400 metres.

A will have a problem: the weight on his back will slow him down more and more the further he runs. So to achieve the same result as over 100 metres, the weight on his back will have to be reduced.

But what if B and C are much better suited to 400 metres than to 100 metres, and A cannot run that far at all?

In other words a change of distance could create circumstances for which historical information related to the old distance cannot be used.

Some horses are better suited to certain distances than others. Some carry weight better, because of age or build. Some cope better when the ground is soft, others only when it is hard. Add to these other factors such as the horse’s well-being, fitness, race tactics, jockeyship etc. and the size of the problem of handicapping a race faced by the handicapper becomes clearer.
MERIT HANDICAPPING

Merit Handicapping involves rating adjustments based on **FACTS** as well as **JUDGEMENTS**.

**Facts are:**
- The actual weight differences between the horses.
- The actual margins between horses at the end of a race.
- The drag effect of weight over different racing distances.

**Judgements include:**
- Did he get a fair start?
- Did he have to race wide?
- Was the pace of the race true or false?
- Was the horse impeded during the race?
- How did the horse act in the going?
- Was the horse racing over a suitable distance?
- Was a large margin of victory truly representative of his superiority?

**What is Handicapping really?**

**ANSWER:**

*EQUALISING CHANCES of COMPETITORS*

Hence, Merit Handicapping is a method of allocating weight impediments to equalise the chances of horses, based on measurable facts in conjunction with the interpretation of race results.
MEASURING MERIT

The measurable factors are the actual weight that the horse carries, the margin of victory or defeat, the drag effect of weight over different racing distances and the age of a horse.

Some non-quantitative factors, subject to interpretation by the handicapper, are things like the quality of opposition, the pace of the race, the effect of having raced wide, being hindered during the running, the impact of the going and the apparent well-being of the animal.

Of the measurable factors the drag effect of weight needs explanation. It is apparent that it is more difficult to carry weight the further one goes. In horse racing it is generally accepted that one kilogram slows a horse down by one length over one mile (1600 metres). Distances shorter than this necessitate the allocation of more weight to achieve the same one length 'drag' on a horse whilst less weight is required over longer distances.

DRAG EFFECT OF WEIGHT
Measurement of beaten margins expressed in units of 0.5 kg.

With the knowledge of the effects of weight over different race distances it is possible to equate the margin of victory or defeat as a measure of weight.

The application of simple mathematics to any race result whereby a race rating is allotted based on (1) the actual weight carried by a horse (2) less the weight value of the margin of defeat. This gives every horse an actual 'weight value' for his performance in that race.

Once these relative weight values have been determined for each horse in a race the handicapper now uses his judgement to effectively quantify the overall value of the race.

Comparisons will be made based on the level of ratings of each horse prior to the event. It is assumed that one or more of the contestants achieved a level of performance consistent with their pre-race rating, in other words they run to 'par'. These animals are used as 'line horses'.

They are the “key” against which the other horses in a race will be measured. “Line horses” are generally consistent and genuine animals and therefore their performance can more often than not be relied upon. A line horse would also preferably be an animal that has run a place.

### Generally applied scale to losing margins

<table>
<thead>
<tr>
<th>Beaten Margin</th>
<th>Sprint up to 1200m</th>
<th>Sprint up to 1700m</th>
<th>Intermediate up to 2200m</th>
<th>Long up to 2600m</th>
<th>Extended beyond 2600m</th>
</tr>
</thead>
<tbody>
<tr>
<td>up to 0.5</td>
<td>1 to 2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>1.5</td>
<td>5</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>6</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>2.5</td>
<td>7</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>8</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>3.5</td>
<td>9</td>
<td>7</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>10</td>
<td>8</td>
<td>6</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>4.5</td>
<td>11</td>
<td>9</td>
<td>7</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>12</td>
<td>10</td>
<td>8</td>
<td>6</td>
<td>4</td>
</tr>
</tbody>
</table>

Measurement of beaten margins expressed in units of 0.5 kg.
HOW AND WHY?

Identify an individual that generally performs to a consistent level. Often the overall result can identify the race level - E.g. if the 3rd, 4th and 5th finish together then they can be assumed to have run to their handicap.

By comparing against the performance of the “line horse” the performances of the other horses in the race can be determined.
# DO THE HANDICAP

## 1600m Handicap

<table>
<thead>
<tr>
<th>Horse</th>
<th>KG</th>
<th>Margins/Lengths</th>
<th>Equiv</th>
<th>Comp*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st FLOWER BOWL</td>
<td>55</td>
<td>-</td>
<td>-</td>
<td>0</td>
</tr>
<tr>
<td>2nd PAINTER</td>
<td>55</td>
<td>Nk</td>
<td>0.25</td>
<td>1</td>
</tr>
<tr>
<td>3rd WOOD OWL</td>
<td>55</td>
<td>0.5</td>
<td>0.75</td>
<td>2</td>
</tr>
<tr>
<td>4th PAPER CHASE</td>
<td>55</td>
<td>1</td>
<td>1.75</td>
<td>4</td>
</tr>
<tr>
<td>5th PHONE CALL</td>
<td>55</td>
<td>3</td>
<td>4.75</td>
<td>10</td>
</tr>
<tr>
<td>6th PRINCE</td>
<td>55</td>
<td>2.75</td>
<td>7.50</td>
<td>15</td>
</tr>
</tbody>
</table>

**Adjustments**

<table>
<thead>
<tr>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>0</td>
</tr>
<tr>
<td>-2</td>
</tr>
<tr>
<td>-3</td>
</tr>
</tbody>
</table>

There are no valid excuses in the race.

Line Horse - No Adjustment.

*Comp = the performance of each horse compared to the line horse
Even though he has won, it is clear that EATON SQUARE cannot be used as the key to rate this race. If he is assumed to have run to his rating then all the other horses have run well above their pre-race rating assessments - a highly unlikely event.
Sprinters mature more quickly than stayers. It is harder to carry weight the further one goes.

**WEIGHT-FOR-AGE**

_Scale that measures physical progress of the thoroughbred horse as he matures_

**BASIC PRINCIPLES**

Sprinters mature more quickly than stayers. It is harder to carry weight the further one goes.

**WEIGHT FOR AGE**

In 1855 Admiral Rous introduced a table that measures the progress of maturity that takes place on average in every thoroughbred. **It expresses, in terms of weight, what horses of different ages, over a given distance, at different times of the year, should carry to equalise any difference in maturity.** Although introduced nearly 150 years ago the Admiral's WFA Scale has stood the test of time. This scale, with only minor variations, is applied throughout the racing world.

Weight-for-Age is best described as the physical progress a horse makes as it matures. By the age of 18-24 months a horse will have achieved 95% of its mature height and weight and by the age of four, full maturity will be reached.

In general term's sprinters mature more quickly than stayers, and the scale takes this into account. From a handicapping point of view the immaturity factor must be taken into consideration when assessing a young horse's performance, and where necessary the appropriate compensation should be credited.

**ADJUSTMENTS TO RATINGS**

In merit handicapping a horse's rating is adjusted based on performance. There is no arbitrary or standard penalty.
In handicap races it can be assumed that the winner has 'beaten the handicap' and as such his performance will not be used as the yardstick to rate the race.

There are occasions when the second, third or even fourth placed horses will be rated as having 'beaten the handicap'. A handicapper will base his race assessment on his interpretation of the performance of the line horse(s) and adjustments to ratings of other horses will be made relative to these horses and with consideration of the animal's overall rating profile.

In races where the weight allocations are made by terms or conditions the assessment of the race is a lot less straightforward.

In a level weight contest the horse with the highest rating is more likely to win, if he doesn't there are likely to be tangible reasons as to why he didn't - for example the distance of the race did not suit. But here again, the line horses will provide a clue as to the level of ratings of the horses in the race.

In these races it is quite possible that a winner may receive a rating adjustment that is less than a placed horse.

**ADJUSTMENTS TO RATINGS**

Remember, the rating assessment is a matter of comparing performance against weight carried against what opposition.

When making adjustments to a horse's rating the previous record of the animal is taken into account. Most horses reveal their level of ability early in their careers. Therefore out of character performances must be treated with caution.

The aim of rating adjustments is to *level the playing field*, a winner must still remain competitive, and the beaten horses must have rating adjustments where necessary to make them more competitive.
Over a period of time the cross-referencing of many lines of form establishes where a horse fits in terms of the whole population.

This, in effect, is what is known as the 'long handicap' where the measured ability of the animal, as reflected by his rating, places him at some position in an imaginary handicap for all horses.

The relative abilities of two different animals can then be quantitatively gauged, even to be compared with horses from different eras or generations.

**THE GENERAL GUIDELINES TO RATING REASSESSMENTS**

(1). Winners receive an upwards adjustment based on the margin and manner of victory, quality of opposition and weight differentials.
(2). Placed horses receive necessary adjustments based on proximity to the ‘Line Horse’.
(3). Unplaced runners receive relief based on overall performance profile.

<table>
<thead>
<tr>
<th>Winners</th>
<th>2 to 10 points in Handicaps. 2 or more points in Terms Races. High assessments are possible in Fixed Weight and WFA races.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Placed</td>
<td>0 to 5 points as determined by performance against ‘Line Horse. Placed horses in non-features races are not promoted in Class.</td>
</tr>
<tr>
<td>Unplaced</td>
<td>0 to 8 points relief based on Performance Profile. Last start winner, Veterinary excuse and returning from layoff - No Relief</td>
</tr>
</tbody>
</table>

- [Singapore Turf Club](https://www.singaporeturfclub.com)
# Open Benchmark 67 - 1600m

## Example of Race Assessment and Rating Adjustments

<table>
<thead>
<tr>
<th>Horse</th>
<th>FIN</th>
<th>KG</th>
<th>LBH</th>
<th>Drag Adj</th>
<th>Pre</th>
<th>Actual LH Adj</th>
<th>New Rating</th>
<th>Peni Relief</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAR SAPPHIRE</td>
<td>1</td>
<td>55</td>
<td>-</td>
<td>0</td>
<td>59</td>
<td>63 (+4)</td>
<td>66 (+6)</td>
<td></td>
<td>Won easily</td>
</tr>
<tr>
<td>CASH FORTUNE</td>
<td>2</td>
<td>55</td>
<td>1.3</td>
<td>3</td>
<td>59</td>
<td>60 (+1)</td>
<td>60 (+1)</td>
<td></td>
<td>Wide on turn</td>
</tr>
<tr>
<td>ZHALUTE</td>
<td>3</td>
<td>56</td>
<td>1.8</td>
<td>4</td>
<td>60</td>
<td>60</td>
<td>60</td>
<td>0</td>
<td>Line horse</td>
</tr>
<tr>
<td>MAUMILL'S MAGIC</td>
<td>4</td>
<td>56</td>
<td>2.3</td>
<td>5</td>
<td>59</td>
<td>58 (-1)</td>
<td>59</td>
<td>0</td>
<td>Hold up 200m</td>
</tr>
<tr>
<td>JESTER'S ROMANCE</td>
<td>5</td>
<td>51</td>
<td>3.5</td>
<td>7</td>
<td>52</td>
<td>49 (-3)</td>
<td>51 (-1)</td>
<td></td>
<td>Not competitive</td>
</tr>
<tr>
<td>JUNESON</td>
<td>6</td>
<td>54</td>
<td>4.3</td>
<td>9</td>
<td>58</td>
<td>53 (-5)</td>
<td>56 (-2)</td>
<td></td>
<td>Not competitive</td>
</tr>
<tr>
<td>STRATEGIC ALLIANCE</td>
<td>7</td>
<td>56</td>
<td>4.5</td>
<td>9</td>
<td>60</td>
<td>55 (-5)</td>
<td>60</td>
<td>0</td>
<td>Last start winner</td>
</tr>
<tr>
<td>DOUBLE TAP</td>
<td>8</td>
<td>55</td>
<td>4.6</td>
<td>9</td>
<td>59</td>
<td>54 (-5)</td>
<td>56 (-3)</td>
<td></td>
<td>Not competitive last 5</td>
</tr>
<tr>
<td>CRYSTAL CITY</td>
<td>9</td>
<td>59</td>
<td>4.6</td>
<td>9</td>
<td>67</td>
<td>62 (-5)</td>
<td>67</td>
<td>0</td>
<td>Very slow to jump</td>
</tr>
<tr>
<td>NARCISSUS</td>
<td>10</td>
<td>56</td>
<td>6.3</td>
<td>13</td>
<td>61</td>
<td>52 (-9)</td>
<td>58 (-3)</td>
<td></td>
<td>Not competitive last 5</td>
</tr>
<tr>
<td>EAGER EAGLE</td>
<td>11</td>
<td>58</td>
<td>7.5</td>
<td>15</td>
<td>66</td>
<td>55 (-11)</td>
<td>64 (-2)</td>
<td></td>
<td>Not competitive last 2</td>
</tr>
<tr>
<td>YABONGA</td>
<td>12</td>
<td>56</td>
<td>8.3</td>
<td>17</td>
<td>59</td>
<td>46 (-13)</td>
<td>59</td>
<td>0</td>
<td>3 month layoff</td>
</tr>
<tr>
<td>SECRET SUCCESS</td>
<td>13</td>
<td>53</td>
<td>19</td>
<td>38</td>
<td>56</td>
<td>22 (-34)</td>
<td>56</td>
<td>0</td>
<td>Vet report</td>
</tr>
<tr>
<td>GREEN LIGHT</td>
<td>14</td>
<td>53</td>
<td>20</td>
<td>40</td>
<td>56</td>
<td>24 (-36)</td>
<td>56</td>
<td>0</td>
<td>Vet report</td>
</tr>
</tbody>
</table>

**Legend**

- Fin = Finishing Position
- KG = Weight Carried
- LBH = Lengths behind the winner
- Drag Adj = adjustment made against the winner for the beaten margin
- Pre = Pre Race Rating of the horse
- RR = Race Rating for the horse
- Actual LH Adj = points adjustment against the “Line Horse”
- New Rating = The actual rating of the performance
- Peni Relief = The handicappers final rating based on assessment

"ZHULATE = ‘Line Horse’"
Internationally recognised Handicapping System

Merit System provides for competitive racing

Merit System provides link to the International Classifications