

**A Novel Approach to Deriving Sentencing Frameworks:
Sentencing as a Science and/or Art?
Takaaki Masui v Public Prosecutor [2021] 4 SLR 160**

I. Executive summary

In *Takaaki Masui v Public Prosecutor and another appeal and other matters* [2021] 4 SLR 160 (“*Masui v PP*”), the High Court (“**HC**”) introduced a new sentencing framework for purely private corruption offences under ss 6(a) and 6(b) of the Prevention of Corruption Act (Cap 241, 1993 Rev Ed) (“**PCA**”). Significantly, the HC utilised mathematical concepts to evaluate and determine the content of sentencing frameworks, and also employed multiple two-dimensional and three-dimensional (“**2D**” and “**3D**”) graphs to represent various sentencing frameworks. This case summary will explore the analytical method employed by the HC and discuss whether the new sentencing framework derived from it is a material departure from traditional sentencing frameworks.

II. Material facts

Koh Pee Chiang (“**Koh**”) was the sole proprietor of Chia Lee & Co (“**Chia Lee**”), the sole distributor of edible flour for the Singapore subsidiary (the “**Singapore Company**”) of a Japanese commodities company (the “**Japanese Company**”). Takaaki Masui and Katsutoshi Ishibe (“**Masui**” and “**Ishibe**”; collectively, the “**Appellants**”) were employees of the Japanese Company who were seconded to Singapore to work for the Singapore Company.

In 2002, Ishibe induced Koh to become the industrial flour distributor (through Chia Lee) for the Singapore Company and take part in an unauthorised profit-sharing arrangement in relation to the industrial flour business. Under this arrangement, Koh would only receive US\$3 of the expected profits of US\$23 per metric ton of industrial flour, while the Appellants would split any remaining profit equally. When Koh later wished to withdraw from this arrangement, the Appellants threatened him with the withdrawal of their support and protection for his edible flour business. The profit-sharing arrangement continued until 2007, when Koh could no longer afford to pay the Appellants. In 2009, the profit-sharing arrangement was discovered by the Japanese Company.

The Appellants were prosecuted for and convicted on 28 charges under s 6(a) read with s 29(a) of the PCA for conspiring with one another to corruptly obtain bribes from Koh as an inducement for doing acts in relation to their employers’ affairs.

The Appellants appealed against their convictions and sentences. The HC dismissed the Appellants’ appeals against conviction after amending the bribe quanta in respect of two of the 25 charges facing each Appellant, but allowed their appeals against sentences. The HC’s decision in *Masui v PP* focuses on the latter appeal. This case comment delves only into the appeals against the sentences.

III. Issues

On appeal, the HC considered four main issues pertaining to sentencing frameworks and their application:

- (a) Is it appropriate to develop a sentencing framework for corruption offences under the PCA?
- (b) If so, what *type* of framework should be employed, and why?
- (c) What should the precise framework be?
- (d) How should that framework applied to the facts before the court (i.e. what should the appropriate sentence for each appellant be)?

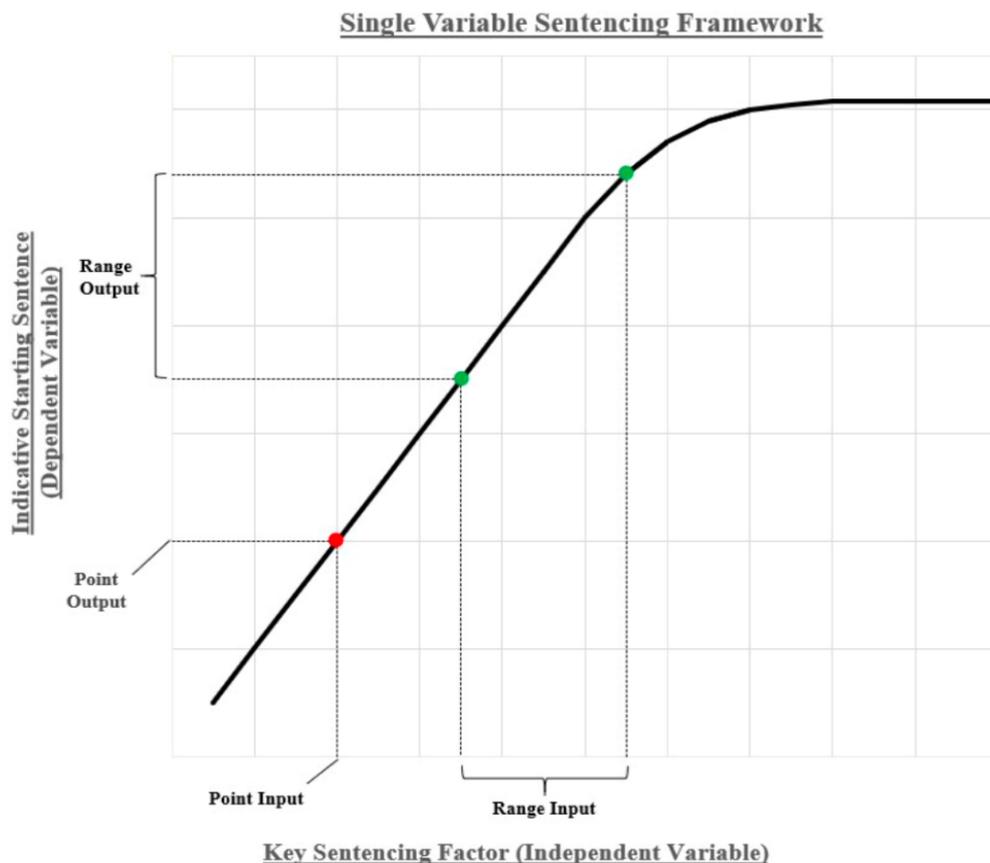
Separately, the HC also considered the appropriate penalty under s 13 of the PCA, and whether this was a case suitable for prospective overruling.

A. Whether it is appropriate to develop a sentencing framework for corruption offences under the PCA

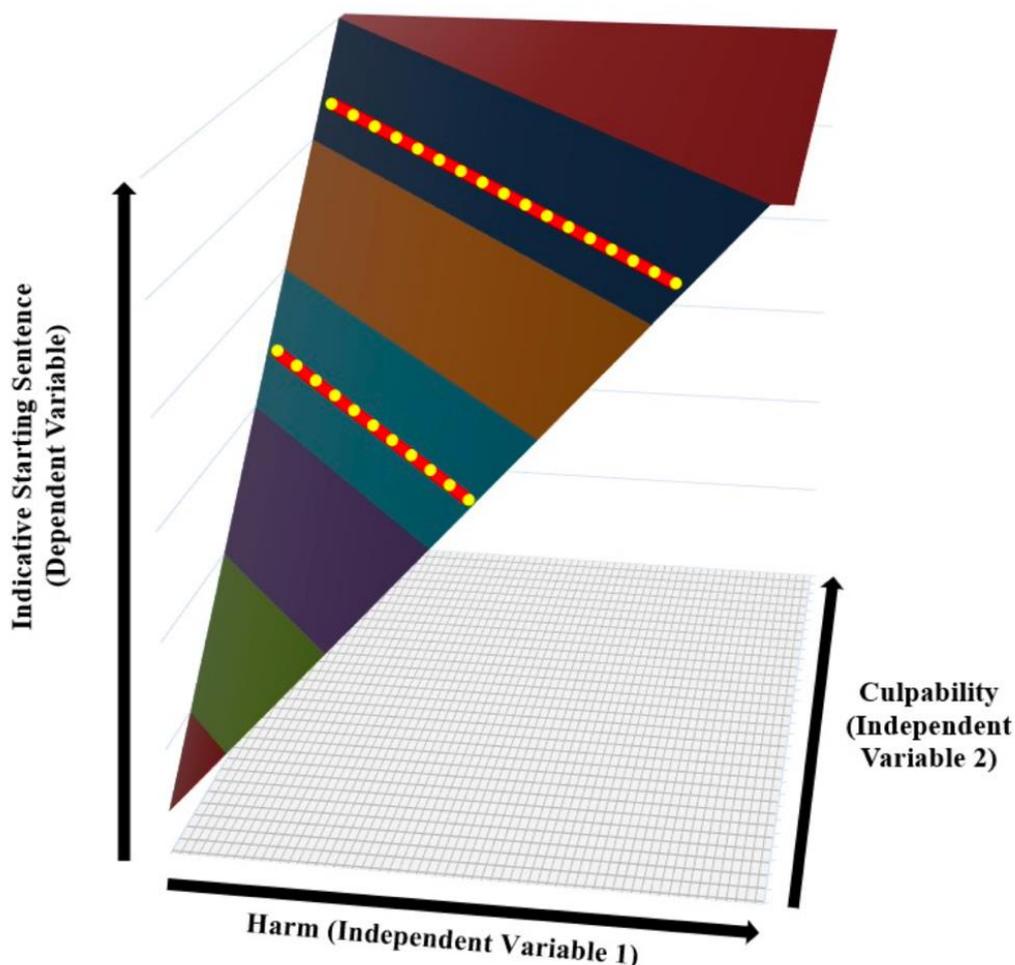
Given the lack of analogous precedents, the HC held that it was appropriate to develop a sentencing framework for offences under ss 6(a)–(b) of the PCA that concerned purely private corruption (but not other kinds of corruption offences under those sections). This would provide guidance to courts on the appropriate sentence in cases concerning purely private corruption offences and increase broad consistency in their sentencing outcomes.

B. Type of framework to be applied

Sentencing frameworks “tend to focus on deriving a preliminary sentence based on the presence or absence of certain key sentencing parameters”, which can then be adjusted based on other relevant factors. This preliminary sentence is also known as the indicative starting sentence or indicative sentence. The HC considered three possible forms which a sentencing framework could take: a single independent variable framework (which “focuses on the presence of one dominant sentencing parameter to determine an indicative sentence”), a double variable framework (which considers two principal factual elements, i.e. parameters), or a multiple variable framework (which considers “more than two key independent variables to determine an indicative sentence”). The HC also provided graphical representations of single and double variable frameworks (see figures reproduced below).



Double Variable Sentencing Framework



In the context of purely private corruption offences, the HC held that a single independent variable sentencing framework was not suitable because there was more than one dominant or principal determinant of the indicative sentence (i.e. harm and culpability). The HC also held that a multiple variable framework was unsuitable because there was insufficient guidance from case law to determine the precise weight which should be given to each sentencing factor relative to one another.

The HC then set out five broad principles which sentencing frameworks should conform to:

- (a) **The Proportionality principle:** The sentence must be proportionate to the crime, i.e. a more severe crime should attract a higher penalty, up to the statutory limit prescribed by Parliament.
- (b) **The Continuity principle:** The indicative starting sentences must increase smoothly and continuously, in tandem with the increasing severity of the crime. There should not be unexplained gaps in the indicative starting sentences prescribed by the sentencing framework.
- (c) **The Completeness principle:** The framework should ordinarily include the full range of sentences (in type and magnitude) prescribed by Parliament.
- (d) **The Single Point principle:** A point input (a specific value for an independent variable, e.g. exactly 5g of heroin trafficked) must only produce one point output (e.g. 7 years' imprisonment). Conversely, a range input (a range of values for an independent variable) must only produce a range output (a range of possible sentences). Otherwise, different judges could prescribe different sentences for the exact same set of facts, leading to inconsistency.
- (e) **Elevation Lines of Equal Sentences:** Different combinations of the two independent variables in a double variable framework can give rise to the same indicative starting sentence because they result in offences of the same overall level of criminal severity.

After laying out these five broad principles, the HC analysed the sentencing framework proposed by the Prosecution, as well as an earlier graphical analysis undertaken by Ishibe’s counsel, which took the form of a single variable framework based on the bribe quantum. In contrast, the Prosecution proposed a double variable framework based on culpability and harm (see figure reproduced below).

High	1 to 2 years’ imprisonment	2 to 3 years’ imprisonment	3 to 5 years’ imprisonment
Medium	Up to 1 year’s imprisonment	1 to 2 years’ imprisonment	2 to 3 years’ imprisonment
Low	Fine	Up to 1 year’s imprisonment	1 to 2 years’ imprisonment
Culpability Harm	Slight	Moderate	Severe

The HC rejected Ishibe’s counsel’s single variable framework because the quantum of a bribe was not always the predominant consideration in the sentencing analysis for corruption offences (such as in situations involving coercion). On the other hand, the HC broadly agreed with the Prosecution’s double variable framework because it allowed the court to consider multiple offence-specific factors. However, the HC noted four problems with the structure and content of the Prosecution’s matrix:

- (a) **Incompleteness:** The Prosecution’s framework could not account for situations involving harm or culpability that went beyond “high” or “severe”.
- (b) **Underutilising the sentencing spectrum:** The Prosecution’s matrix did not utilise the entire sentencing spectrum prescribed by Parliament. Although s 6 of the PCA stated that an offender shall be liable on conviction to “a fine not exceeding \$100,000 or to imprisonment for a not exceeding 5 years *or both*”, the Prosecution’s matrix only allowed for a fine or imprisonment, but not both. This would also be contrary to the Completeness principle as it would create gaps in the sentencing.
- (c) **Ambiguity:** The Prosecution’s framework contained ambiguities, where the same offender committing the same crime may be assigned drastically different indicative starting sentences. For instance, an offender whose offence positions him at the blue dot in the figure below could be characterised as having either the highest possible combination of the slight harm, low culpability box (thus subject to a \$100,000 fine) or the lowest possible combination of the moderate harm, medium culpability box (thus subject to 1 year of imprisonment).

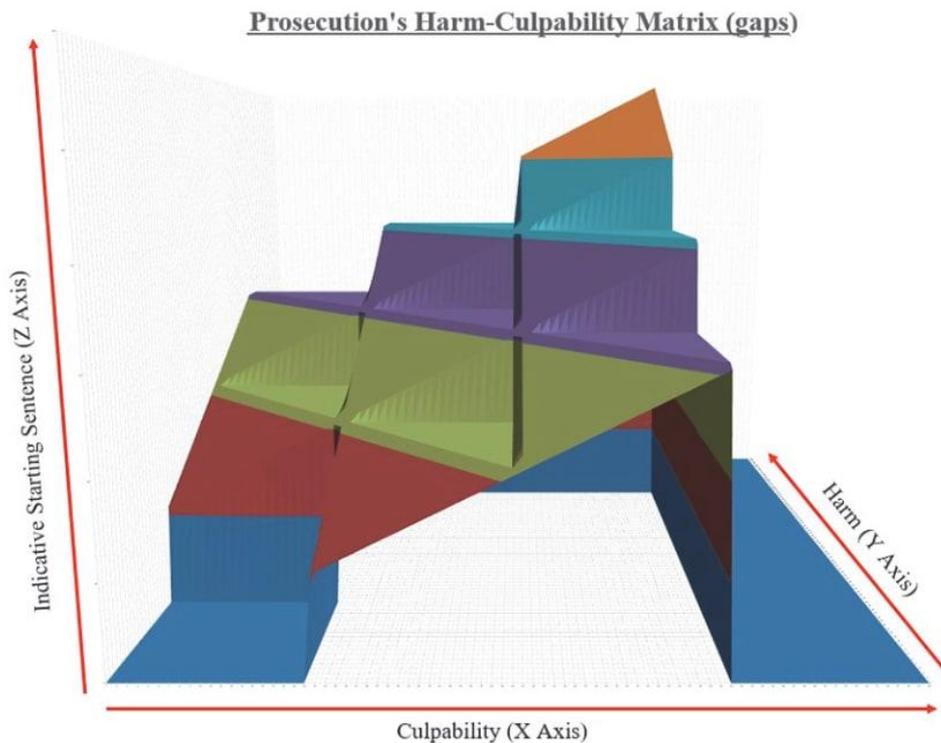
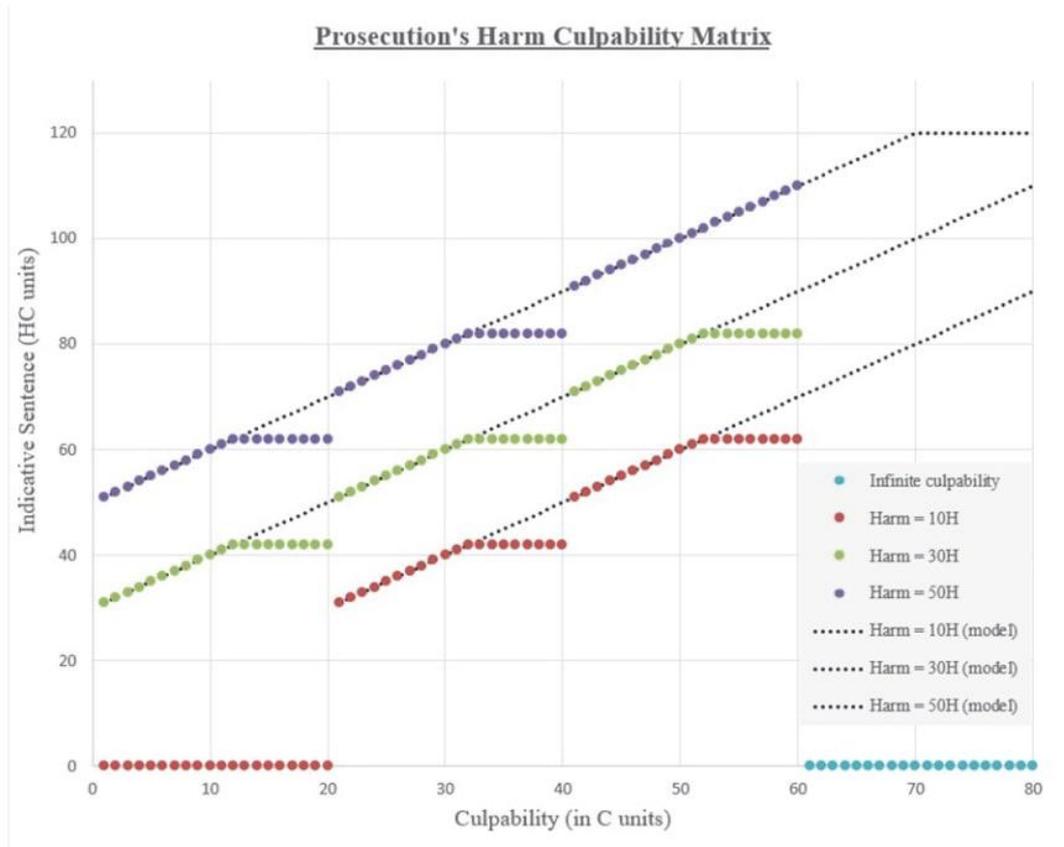
High	1 to 2 years' imprisonment	2 to 3 years' imprisonment	3 to 5 years' imprisonment
Medium	Up to 1 year's imprisonment	1 to 2 years' imprisonment	2 to 3 years' imprisonment
Low	Fine	Up to 1 year's imprisonment	1 to 2 years' imprisonment
Culpability Harm	Slight	Moderate	Severe

(d) **Cliffs and discontinuities:** The Prosecution's matrix violated the Proportionality and Continuity principles because the indicative starting sentences did not increase smoothly and continuously in proportion to the severity of the criminal conduct. As seen in the diagonal shift of the arrows in the figure reproduced below, a slight increase in both harm and culpability would result in a disproportionate increase in the punishment.

High	1 to 2 years' imprisonment	2 to 3 years' imprisonment	3 to 5 years' imprisonment
Medium	Up to 1 year's imprisonment	1 to 2 years' imprisonment	2 to 3 years' imprisonment
Low	Fine	Up to 1 year's imprisonment	1 to 2 years' imprisonment
Culpability Harm	Slight	Moderate	Severe

The diagram illustrates the discontinuities in the sentencing matrix. Red arrows labeled 'C', 'D', '1 year', '2 years', and '3 years' point from the bottom-left cell of one row to the top-right cell of the next row, indicating a disproportionate increase in punishment for a small increase in culpability and harm. Specifically, a jump of 2 years (D) occurs between High and Medium culpability at the Slight harm level, a jump of 1 year (C) at the Moderate harm level, and a jump of 3 years at the Severe harm level. Similar jumps of 1 year and 2 years are shown between Low and Medium culpability levels.

In Annex A of the judgement, the HC represented these gaps through a 2D and 3D graph, as seen in the figures reproduced below.



C. The appropriate framework for offences under ss 6(a) and 6(b) of the PCA

To resolve the problems in the Prosecution’s framework, the HC introduced a modified five-step sentencing framework (the “**Modified Framework**”). In Steps 1 to 3, the court will derive an appropriate indicative sentence based on the relevant offence-specific factors. In Steps 4 and 5, the appropriate indicative sentence will be adjusted based on any relevant offender-specific factors.

(1) *Step 1: Identifying and assessing the offence specific factors*

In Step 1, the court will identify and assess the relevant offence-specific factors present on the facts of the case based on the two broad sentencing parameters of “harm” and “culpability”. Harm is a measure of the injury caused to the society, whereas culpability is a measure of the offender’s relative blameworthiness. The HC provided a non-exhaustive list of offence specific factors that apply to purely private sector corruption cases under ss 6(a) and 6(b) of the PCA, as set out in the table reproduced below:

Offence-specific factors (Non-exhaustive)	
<u>Factors going towards harm</u>	<u>Factors going towards culpability</u>
a. Actual loss caused to principal	a. Degree of planning and premeditation
b. Benefit to the giver of gratification	b. Level of sophistication
c. <i>Harm caused to the giver of gratification</i>	c. Duration of offending
d. Type and extent of loss to third parties	d. Extent of the offender’s abuse of position and breach of trust
e. Public disquiet	e. Offender’s motive in committing the offence
f. Offences committed as part of a group or syndicate	f. <i>The presence of threats, pressure, or coercion</i>
g. Involvement of a transnational element	g. <i>Amount or value of gratification given or received</i>
h. <i>Amount or value of gratification given or received</i>	

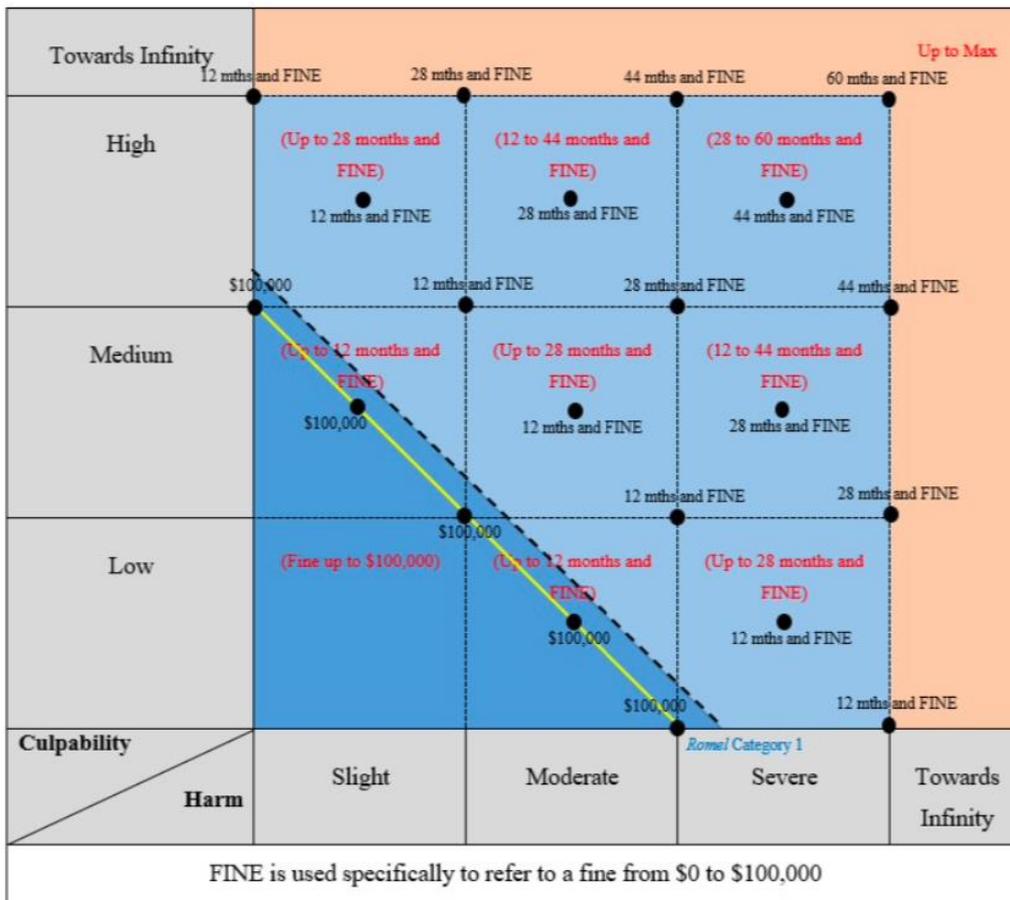
Notably, while the HC opined that the amount or value of gratification received would go towards both “harm” and “culpability”, it also stressed that the court should be wary of double counting the same factor. In its view, double counting could be avoided by stating exactly the relevance of the amount or the amount of value of the gratification to harm and culpability when evaluating both. After identifying the offence-specific factors, the court will broadly determine where the offence lies along the respective spectrums of harm and culpability in the Modified Framework. This is a holistic, broad-brush assessment.

(2) *Steps 2 and 3: Deriving an indicative starting sentence*

At this stage, the court must determine where the offence lies within the Modified Harm-Culpability Matrix, Contour Matrix, or the simplified matrix to derive an indicative starting sentence (as shown in the sections below). The court can also consider whether to impose a fine on top of any custodial sentence. All three matrices are identical in content and apply in much the same way. A court can use whichever one it finds more convenient.

(a) Modified Harm-Culpability Matrix

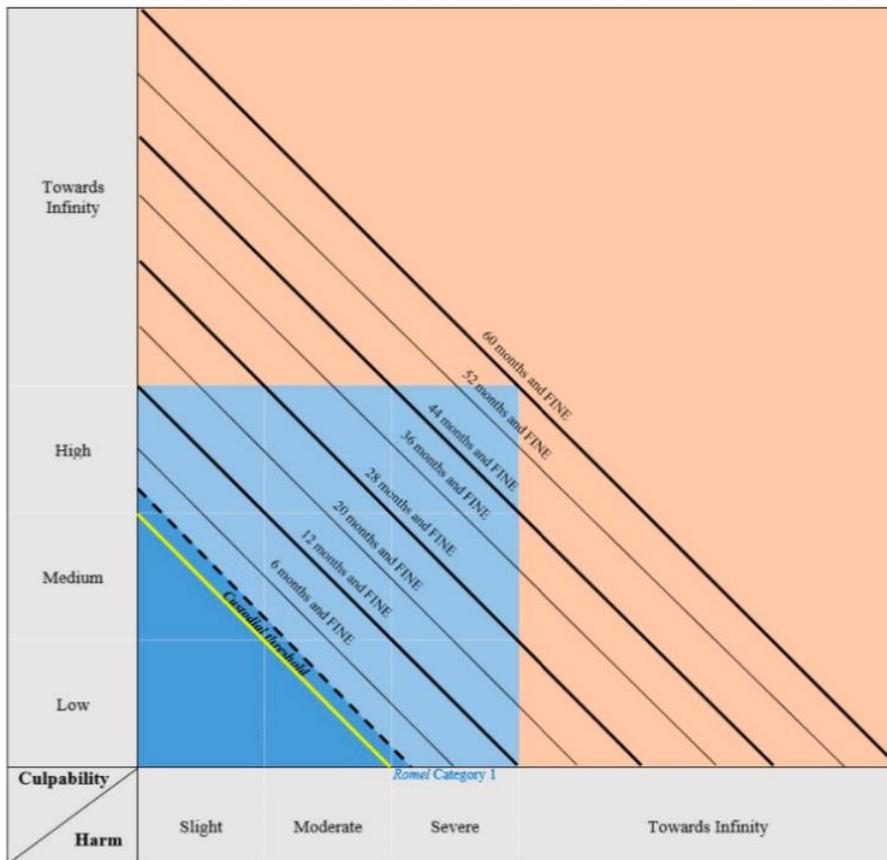
At Step 2, the sentencing judge must exercise his or her discretion to select the indicative sentencing range. For the Modified Harm-Culpability Matrix (see figure reproduced below), the indicative sentencing range refers to the red words within each box of the Matrix. The sentencing judge must also make an assessment as to where exactly the offender’s offence lies within the box of the matrix.



At Step 3, from the offender’s exact position (per charge) within each box, the court can then arrive at the appropriate indicative starting sentence by interpolating from the nearest points labelled with an indicative starting sentence (“**strategic points**”). The strategic points here are the black dots within the matrix.

(b) Contour Matrix

The Contour Matrix (see figure reproduced below) is a simplified representation of the Modified Harm-Culpability Matrix. It retains the main features of the Modified Harm-Culpability Matrix but makes it easier to understand and use by removing the indicative sentencing ranges (in red) in each of the boxes and joining up the points of equal indicative sentences to derive the contour lines (the diagonal continuous non-dotted lines in the Contour Matrix) of equal sentence in its place. The Contour Matrix is logically coherent in that the indicative starting sentence does not change when one moves along a contour line (either culpability or harm increases while the other decreases), assuming equal weight is ascribed to both variables.



As mentioned above, at Step 2, the sentencing judge must exercise his or her discretion to select the indicative sentencing range. For the Contour Matrix, the indicative sentencing range refers to the indicative sentences prescribed with reference to the contour lines within which the levels of harm and culpability fall. At Step 3, from the offender’s exact position (per charge) within the matrix, the court can then arrive at the appropriate indicative starting sentence by interpolating from the strategic points, which for the Contour Matrix, refer to the contour lines.

(c) Simplified matrix

The simplified matrix (see figure reproduced below) should be used in the same way as a normal harm-culpability matrix. However, the HC noted that when applying this simplified matrix, the sentencing judge must bear in mind that: (a) harm and culpability are continuous independent variables; (b) the labels (e.g. slight harm, low culpability) are merely very loose labels delineating the differing degrees of harm and culpability; and (c) every single point in the matrix represents a single combination of a certain level of harm and culpability.

Toward Infinity	Up to 60 months and FINE			
High	Up to 28 months and FINE	12 to 44 months and FINE	28 to 60 months and FINE	
Medium	Up to 12 months and FINE	Up to 28 months and FINE	12 to 44 months and FINE	
Low	Fine up to \$100,000	Up to 12 months and FINE	Up to 28 months and FINE	
Culpability Harm	Slight	Moderate	Severe	Toward Infinity
FINE is used specifically to refer to a fine from \$0 to \$100,000				

(d) Deriving the content of the framework

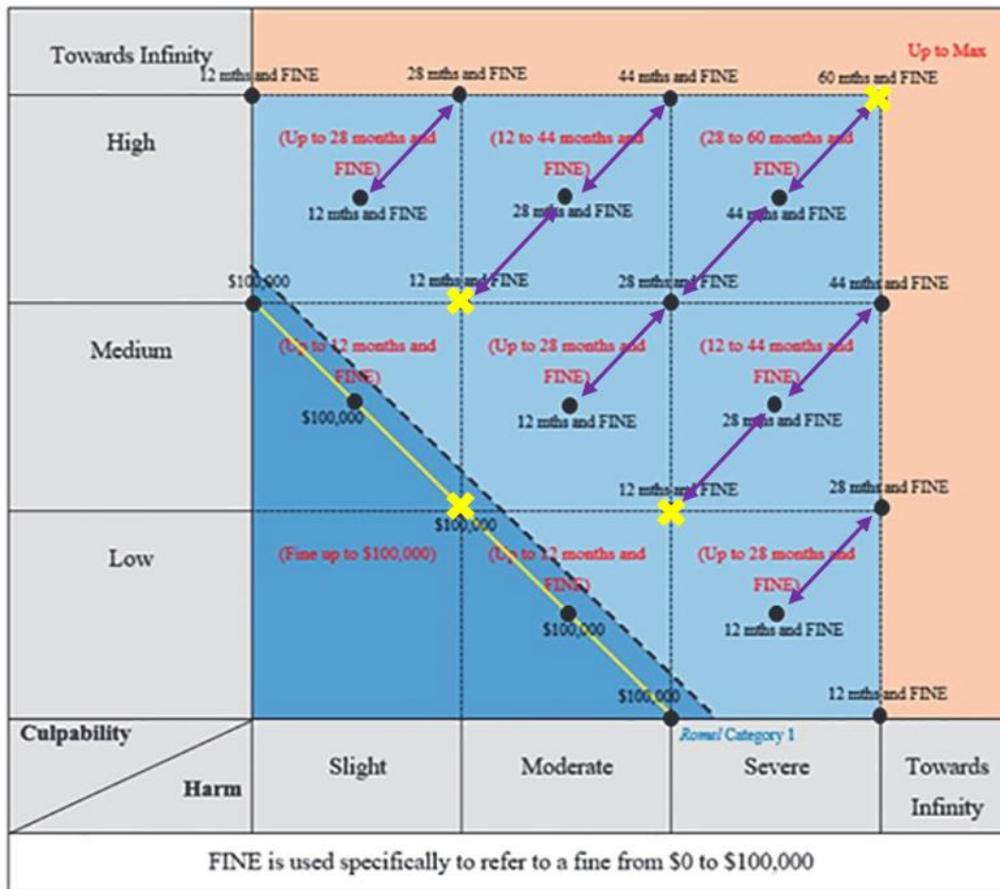
In Annex A of the judgement, the HC explained how it derived and finalised the values in the Modified Harm-Culpability matrix: First, the HC considered the general principles and trends in cases involving purely private sector corruption. Second, the HC approximated the appropriate indicative sentences based on the above principles to generate a “Preliminary Harm-Culpability Matrix”. Third, the HC validated values in the Preliminary Harm-Culpability Matrix by backtesting it with reference to case precedents. Fourth, the HC further elaborated on the finalised matrix, i.e. the Modified Harm-Culpability Matrix.

In this summary, we focus on the second stage concerning the approximation of the appropriate indicative sentences. Here, the HC fixed four points (represented by the yellow crosses in the figure reproduced below) on the Modified Harm-Culpability Matrix and derived the remaining values in the Matrix by extrapolating them from the original four points. The four points are the \$100,000 fine at the slight harm, low culpability box,¹ the “12 mths and FINE” at the top-most point of the moderate harm, low culpability and slight harm, medium culpability boxes,² and the “60 mths and FINE” at the severe harm, high culpability box.³ The HC then extrapolated the remaining values from these four points following the Continuity and Proportionality principles. As can be seen from the purple arrows in the figure reproduced below, each value is equidistant from each other with a difference of 16 months imprisonment.

¹ HC held that slight harm, low culpability box is labelled “Fine” to reflect the general position that many purely private sector corruption cases that do not present strong aggravating factors(eg, no corruption of a foreign public official or involvement of a strategic industry) may be dealt with via the imposition of a fine [A.20].

² HC agreed with Prosecution and Ishibe’s counsel that both the moderate harm, low culpability and slight harm, medium culpability boxes have an indicative sentence of up to one year’s imprisonment plus fine up to\$100,000 [A.27].

³ This reflects the statutorily prescribed maximum sentence of five years’ imprisonment and \$100,000 fine. [A.21].



(e) Analysis of the Modified Harm-Culpability Matrix and the Contour Matrix

Both the Modified Harm-Culpability Matrix and the Contour Matrix addressed the problems in the Prosecution’s framework. First, in response to the underutilisation problem, the possibility of a combination sentence (i.e. imprisonment term and fine) is accounted for. Second, in response to the incompleteness problem, a “Towards Infinity” section accounts for extreme levels of harm and culpability. Third, in response to the problem of cliffs and discontinuities, the indicative sentencing range in some of the boxes overlap with others.

Both matrices also provide for a custodial threshold (represented by the yellow line in the matrices) beyond which the severity of the offence mandates that the indicative sentence must include an imprisonment term, rather than only a fine.

(3) *Steps 4 and 5: Offender-specific factors and the totality principle*

At Step 4, the court considers the offender-specific factors which are generally applicable in all criminal offences. The HC set out a non-exhaustive list of considerations in the figure reproduced below:

Offender-specific factors (Non-exhaustive)	
<u>Aggravating factors</u>	<u>Mitigating factors</u>
(a) Offences taken into consideration for sentencing purposes	(a) A guilty plea
(b) Relevant antecedents	(b) Co-operation with the authorities
(c) Evident lack of remorse	(c) Actions taken to minimise harm to victims

Finally, at Step 5, after determining the sentences for each charge, the court must have regard to the totality principle in determining the global sentence for the offender. This principle requires the court to ensure that the aggregate sentence is “sufficient and proportionate to the offender’s overall criminality”.⁴

D. The appeal against sentence

The HC then applied the Modified Framework to the charges facing the Appellants. At Step 1, having considered the factors going toward harm (significant harm to Koh and harm to the Japanese Company) and culpability (the large amount of the gratification per charge, the sophistication of the offences which involved much planning and premeditation, the use of coercion, and the abuse of position and breach of trust), the HC found that the aggregate harm was at the lower end of severe and that culpability was at the higher end of medium.

At Step 2, the range of indicative starting sentences based on a broad interpolation from the Contour Matrix was between 6 to 14 months’ imprisonment plus a fine up to \$100,000 for the individual charges.

At Step 3, the HC provided more discrete sentencing ranges according to the different amounts of gratification received for each charge bearing in mind all the other offence-specific factors present on the facts of this case, set out in the figure reproduced below:

Amount of Gratification	Indicative Starting Sentence per charge (imprisonment)
More than S\$100,000	12 months and above
S\$80,000 to S\$100,000	11 to 12 months
S\$60,000 to S\$80,000	10 to 11 months
S\$40,000 to S\$60,000	9 to 10 months
S\$20,000 to S\$40,000	8 to 9 months
Below S\$20,000	8 months and below

At Step 4, the HC held there were no offender-specific factors warranting a downward adjustment of the indicative sentences (such as voluntary disgorgement or remorse).

Finally, at Step 5, the HC held that this was one of the most egregious examples of private sector corruption in Singapore and there was thus a pressing public interest concern in discouraging such conduct. The HC ordered the imprisonment sentences for four charges to run consecutively and for

⁴ *Public Prosecutor v Raveen Balakrishnan* [2018] 5 SLR 799 at [73].

the fines for each charge to be cumulative.

E. Other issues

The HC also made some observations on the appropriate penalty under s 13 of the PCA, and whether this case was suitable for prospective overruling.

First, under s 13(1) of the PCA, where the gratification took the form of an outright gift of money, the court must order the offender “to pay as a penalty ... a sum which is equal to the amount of gratification”. Since the gratification in this case was of that nature, there was no room for any deduction on the basis that portions of the gratification received had later been disgorged. *Second*, the HC found that this case was not suitable for prospective overruling, because it did not cause any serious and demonstrable injustice to the parties. Specifically, the Modified Framework was based on existing sentencing practice and its operation did not deviate from existing sentencing principles.

F. Observations

The judgment has two novel aspects. The first is the HC’s use of 2D and 3D graphs to represent both the single and double variable frameworks as well as the gaps in the Prosecution’s framework. While such graphical representations are useful for visualising data and illustrating key concepts, interpreting the graphs (especially 3D graphs) may be more challenging for uninitiated readers to understand.

The second novel aspect of this case is the HC’s adherence to the Continuity and Proportionality principles, which have the effect of limiting a judge’s discretion in designing sentencing frameworks. This is illustrated in how previous frameworks, such as the Prosecution’s double variable framework, allow for different ranges to be prescribed for each box within a matrix (e.g. 2 to 3 years for the moderate harm, high culpability box but 3 to 5 years for the severe harm, high culpability box), whereas the HC in its Modified Framework had to ensure that the sentencing ranges within each box were equal (e.g. both the moderate harm, high culpability and severe harm, high culpability boxes have a range of 32 months). In the authors’ view, such a limitation is logical and principled because harm and culpability exist on a spectrum, and a comparable increase at different points along the spectrum should be treated the same. This ensures that offenders are given a just outcome in that their sentences are commensurate to the crime committed. Adhering to the Continuity principle also resolves the issues of cliffs and discontinuities that the HC identified in previous sentencing frameworks.

Further, judges can still exercise their discretion at key stages of the sentencing determination to do justice to each individual case. For example, at Step 1 of the HC’s Modified Framework, the court would have to apply its own judgment to weigh the offence-specific factors and determine the offender’s exact position within each box of the sentencing matrix. At Step 3, the court retains the discretion to arrive at an appropriate indicative starting sentence whenever the framework provides a range output. Lastly, at Steps 4 and 5, a sentencing judge may also adjust the final sentences after considering the offender-specific factors, and also when determining the global sentence for the offender (i.e. the totality principle). Thus, judges still retain a significant amount of discretion when applying the Modified Framework and can respond contextually to the case at hand to arrive at a just sentence.

Apart from these two novel aspects, the HC’s sentencing framework largely mirrors traditional sentencing frameworks adopted by past cases. Similar to traditional frameworks (like the one used in *Logachev Vladislav v Public Prosecutor* [2018] 4 SLR 609 (“*Logachev v PP*”), the Modified Harm-Culpability Matrix, Contour Matrix and simplified matrix begin by broadly categorising the harm and culpability of an offence to obtain an indicative starting sentence, before adjusting the sentence based on offender-specific factors (see table below comparing the two frameworks).

	Framework used in <i>Logachev v PP</i>	Framework in <i>Masui v PP</i>
Step 1	Identify the level of harm and the level of culpability based on the offence-specific factors.	Identify and assess the relevant offence-specific factors present on the facts of the case to ascertain the specific degree of severity for the harm and culpability parameters to be applied as pinpoint inputs to the framework.
Step 2	Identify the applicable indicative sentencing range.	Where the court provides a <i>pinpoint input</i> (in Step 1), the framework will throw up a definitive indicative starting sentence as a pinpoint output for the court to consider. Where the court provides a set of <i>range inputs</i> to the framework, the framework will throw up a <i>range output</i> .
Step 3	Identify the appropriate starting point within the indicative sentencing range.	From the <i>range output</i> , the court will exercise its discretion to select the most appropriate indicative starting sentence from the range of indicative starting sentences thrown up by the framework.
Step 4	Make adjustments to the starting point to take into account offender-specific factors.	The court considers the offender-specific factors which do not directly relate to the commission of the offence in question and are generally applicable across all criminal offences.
Step 5	Make further adjustments to take into account the totality principle.	After determining the sentences for each charge, the sentencing court must have regard to the totality principle in determining the global sentence for the offender.

The only difference lies in Step 3, where in the *Logachev v PP* framework, judges would exercise their discretion to select the appropriate indicative starting sentence, now in *Masui v PP*, they have to pinpoint exactly where they lie, and the appropriate indicative starting sentence (the *pinpoint* output) is determined based on the process of interpolation. Put another way, in *Masui v PP*, the judge must explicitly state, through the pinpoint, whether the criminal is on the higher or lower end of “moderate harm”. In *Logachev v PP*, this is implicit within the selection of the appropriate indicative starting sentence (e.g. in a “moderate harm” band which has a maximum sentence of 3 years, sentencing the criminal to 2 years and 11 months of imprisonment would implicitly suggest that the criminal is on the higher end of “moderate harm”). In the authors’ view, this is a welcome change because judges now are required to explain the rationale for awarding a higher sentence in the applicable indicative sentencing range, something which a judge in *Logachev v PP* may not necessarily be required to do.

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