Presentation to Hungarian IPO and WIPO

The Calculation of Damages for IP Infringements
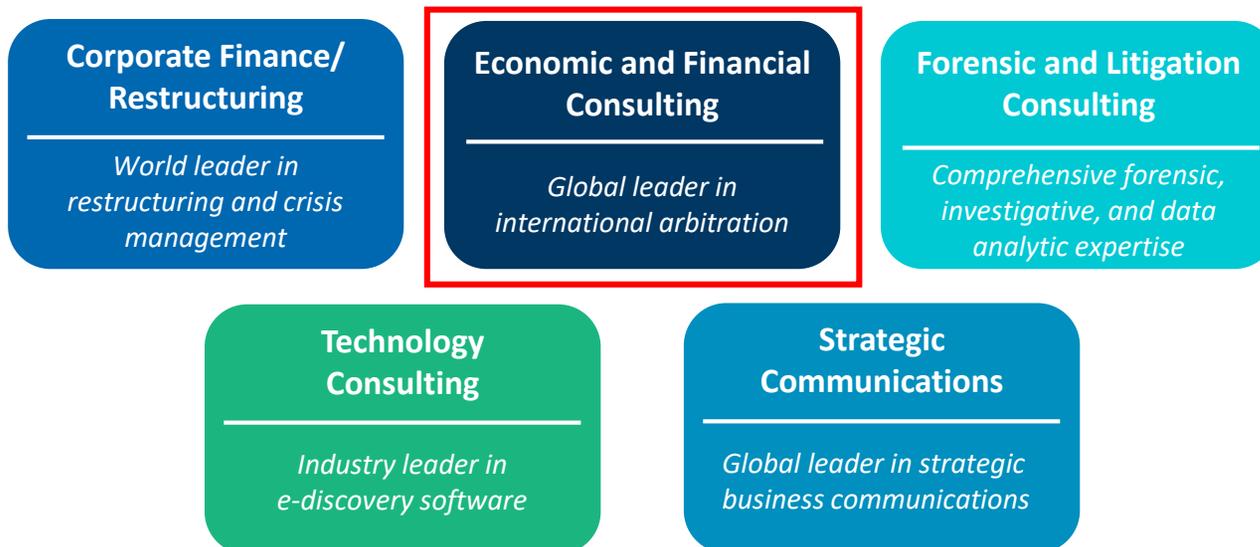## Evidence and Calculation of Loss

Andrew Wynn

28 February 2023

FTI Consulting: Experts with Impact

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Key contact

Andrew Wynn
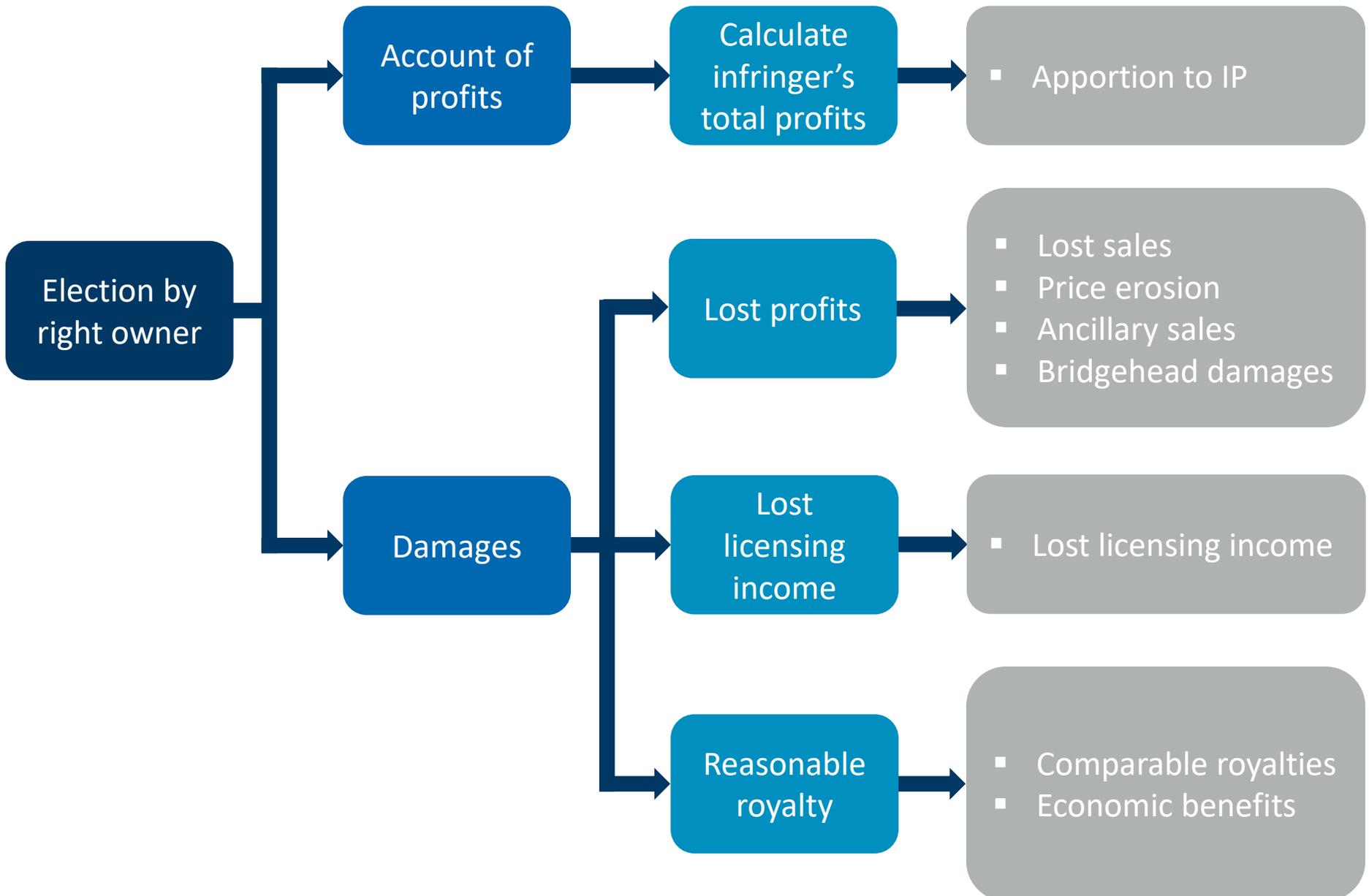*Senior Managing Director*

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- 20+ years of experience providing economic and financial advice to companies, law firms and public institutions

- Specialist in IP valuation, IP damages and commercial disputes in IP-rich industries

- Expert witness across a range of IP contexts and industries
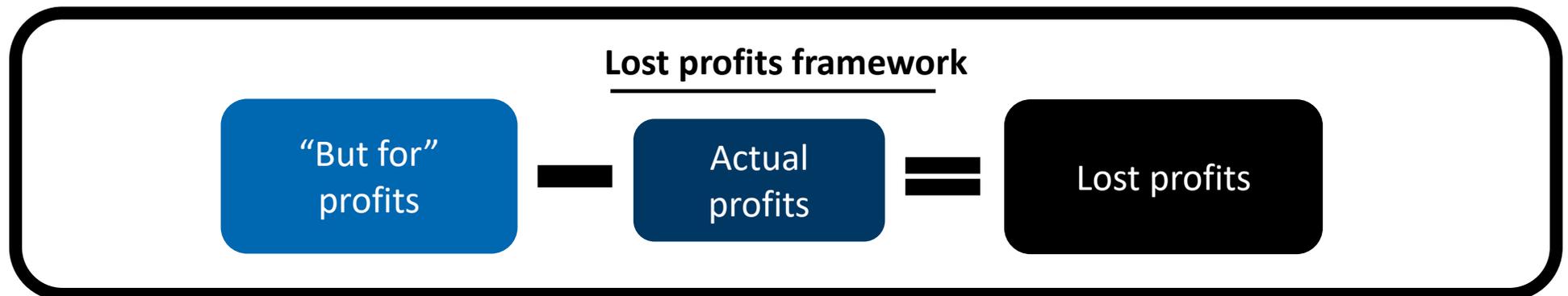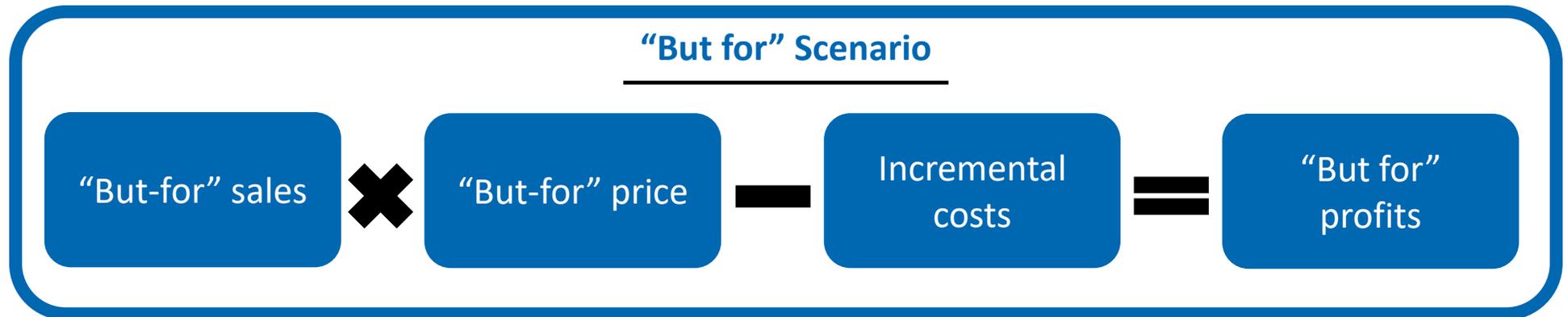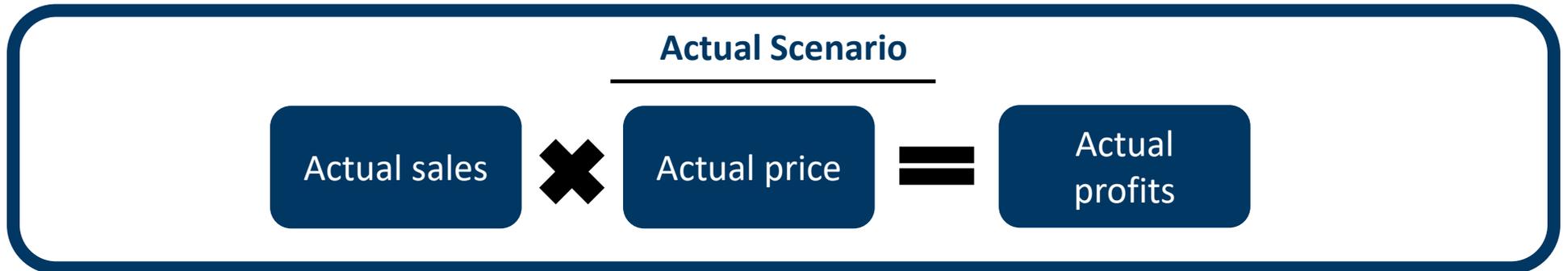
Financial remedies framework
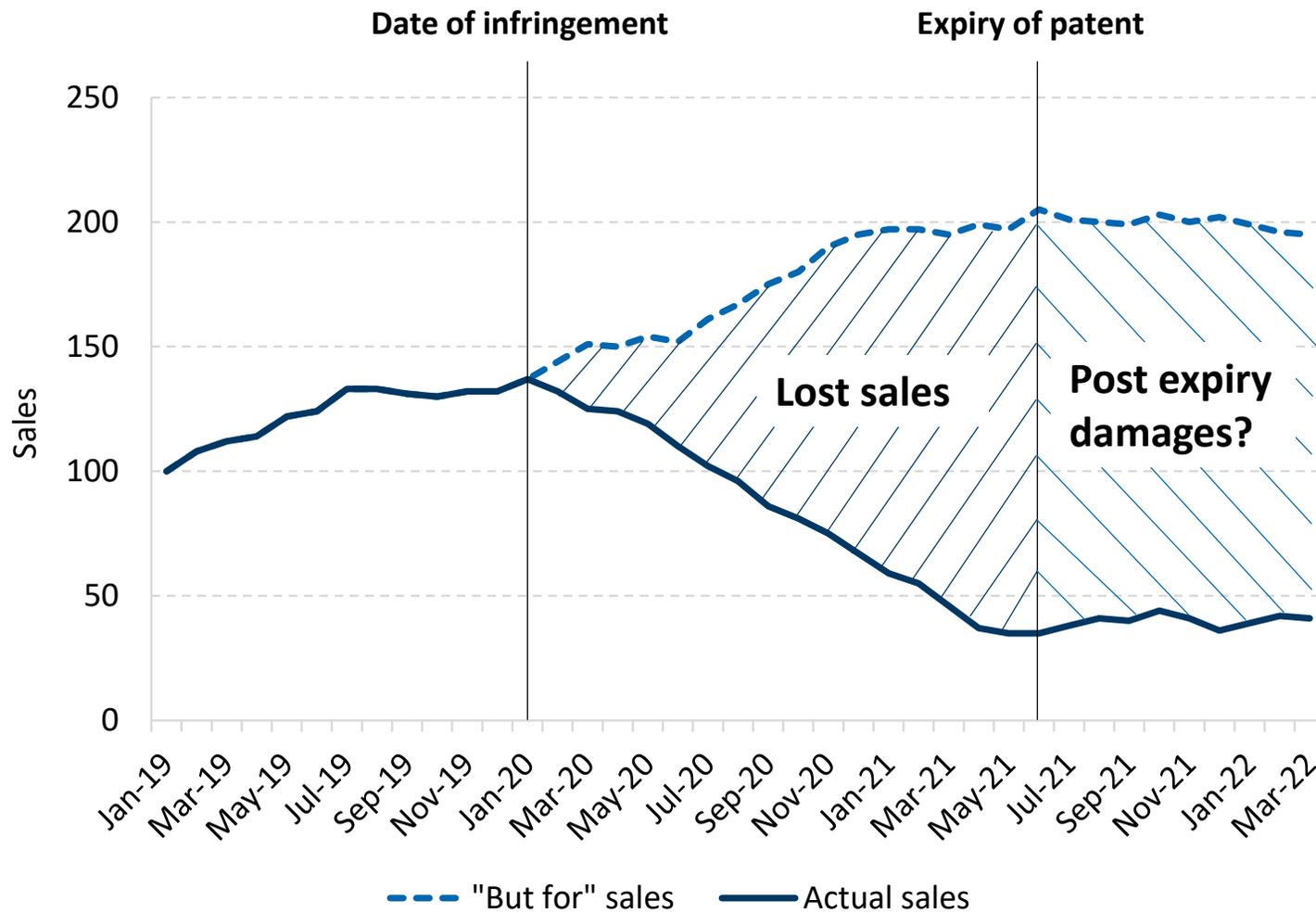
Financial remedies for IP infringement

```
Election by          Account of          Calculate            ▪ Apportion to IP
right owner    ──→    profits      ──→    infringer's
                                          total profits

                                          Lost profits   ──→   ▪ Lost sales
                                                                ▪ Price erosion
                                                                ▪ Ancillary sales
                                                                ▪ Bridgehead damages

               ──→    Damages      ──→    Lost           ──→   ▪ Lost licensing income
                                          licensing
                                          income

                                          Reasonable     ──→   ▪ Comparable royalties
                                          royalty              ▪ Economic benefits
```

Lost profits

Lost profits framework

Actual Scenario

Actual sales $\times$ Actual price $=$ Actual profits

"But for" Scenario

"But-for" sales $\times$ "But-for" price $-$ Incremental costs $=$ "But for" profits

Lost profits framework
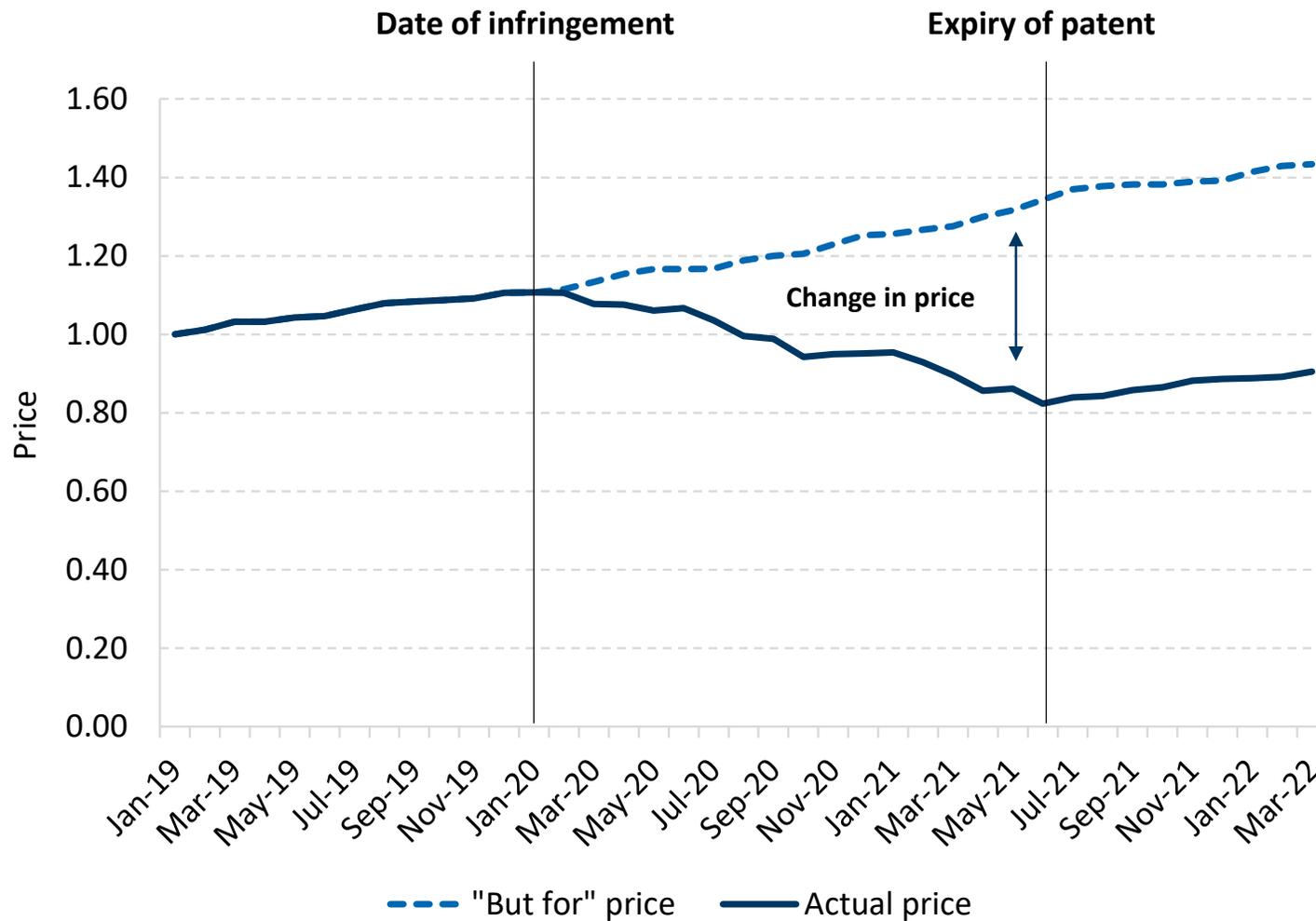
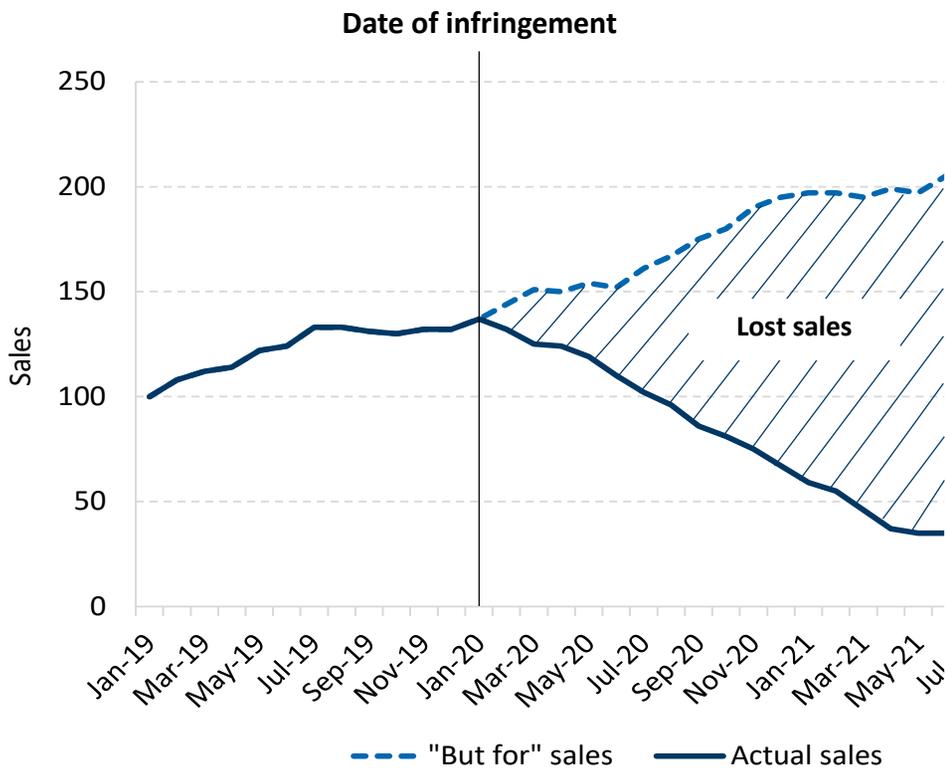"But for" profits $-$ Actual profits $=$ Lost profits

Lost profits framework

Lost profits framework

Lost profits framework: "but for" sales

Natural Experiments

- Requires data on the relevant (or a comparable) market showing unit sales before and after the infringing product entered the market i.e. no simultaneous market entry

- Preferred method
  - based on actual data
  - ease of application

- However, sometimes relevant or comparable data is not always available, therefore we must use other methods

9

Lost profits framework: "but for" sales

Alternative methods	Issues

Demand modelling

Using statistical techniques to analyse and forecast the behaviour of consumers in a particular market in response to changes in a variety of factors, such as prices and substitutes, that influence the demand for a particular product.

- Availability and quality of data
- Model complexity and computational requirements
- Selection and interpretation of independent variables
- Only possible where there is sufficient data

Surveys (Qualitative or Choice modelling)

Qualitative modelling involves gathering data from individuals to capture their opinions, preferences, and attitudes towards specific topics or products
Choice modelling involves presenting respondents with a set of hypothetical product or service profiles that vary in price, quality, design etc. and asking them to choose their preferred option

- Resource and time constraints
- Scale and measurement issues (i.e. reliability, validity, sensitivity)
- Selection bias and sample representativeness
- Question wording and framing effects

Assumptions based on displacement in proportion to market shares

Estimating lost sales caused by an infringing product by assuming that the infringing product displaces a share of sales from the original product proportional to its market share

- Requires a market definition but it is a relatively simple calculation
- Assumption of proportional market shares may not reflect the actual competition in the market

10

Lost profits framework: "but for" prices

Natural Experiments

Date of infringement

Change in price

- - - "But for" price ——— Actual price
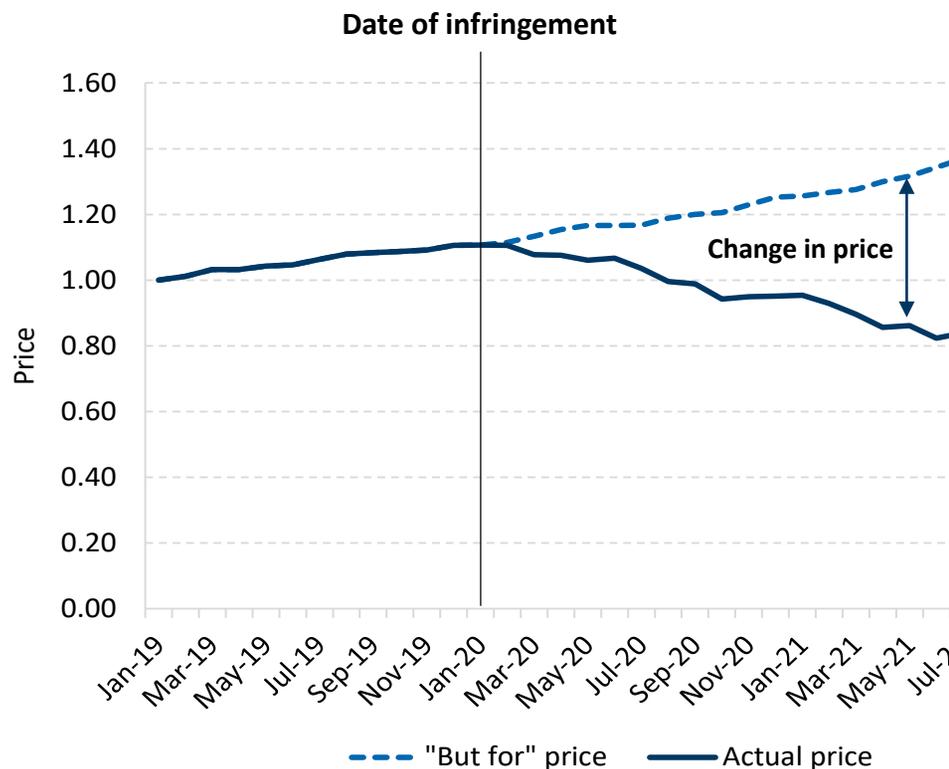
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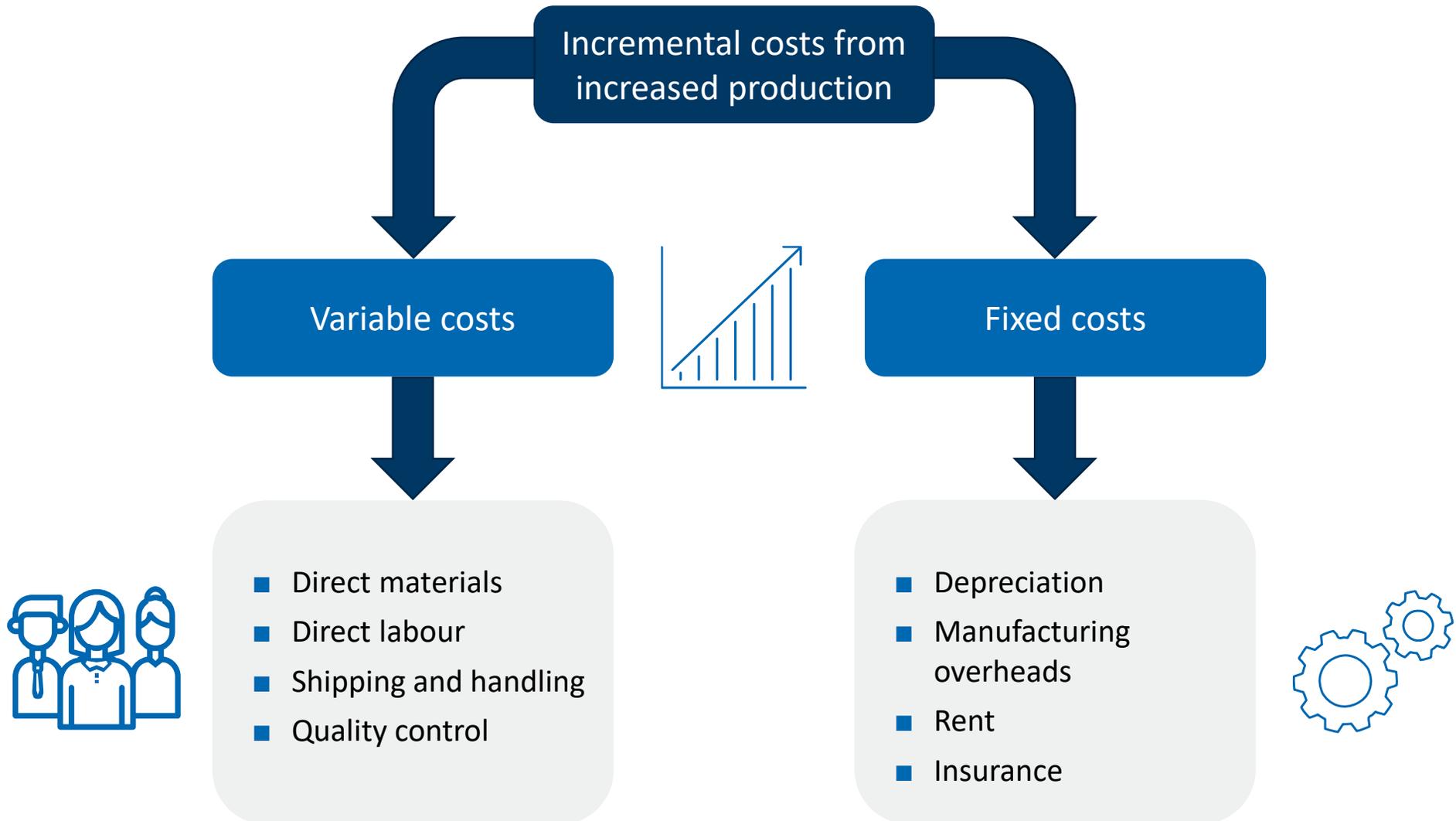# Lost profits framework: "but for" prices

Alternative method

Market elasticity

The process of using market elasticity data, or making assumptions on price elasticity, to estimate the effects on "but for" quantities of the higher "but for" price of the original product that would have prevailed in the absence of an infringing product

Issues

- Depends on nature of competition in the market at issue
- Can be measured using statistical techniques or estimated based on market studies

Lost profits framework: incremental costs

Incremental costs from increased production

Variable costs

- Direct materials
- Direct labour
- Shipping and handling
- Quality control

Fixed costs

- Depreciation
- Manufacturing overheads
- Rent
- Insurance

Other types of damages

Other types of damages: Lost licensing income and Reasonable royalties

Lost licensing income

| Infringing product sales | **✕** | Established royalty | **=** | Lost licensing income |

When it is not possible to establish a lost profits framework or prove that there is an established royalty

Reasonable royalties

[Comparable licence approach | Economic benefits approach] → Expert Opinion
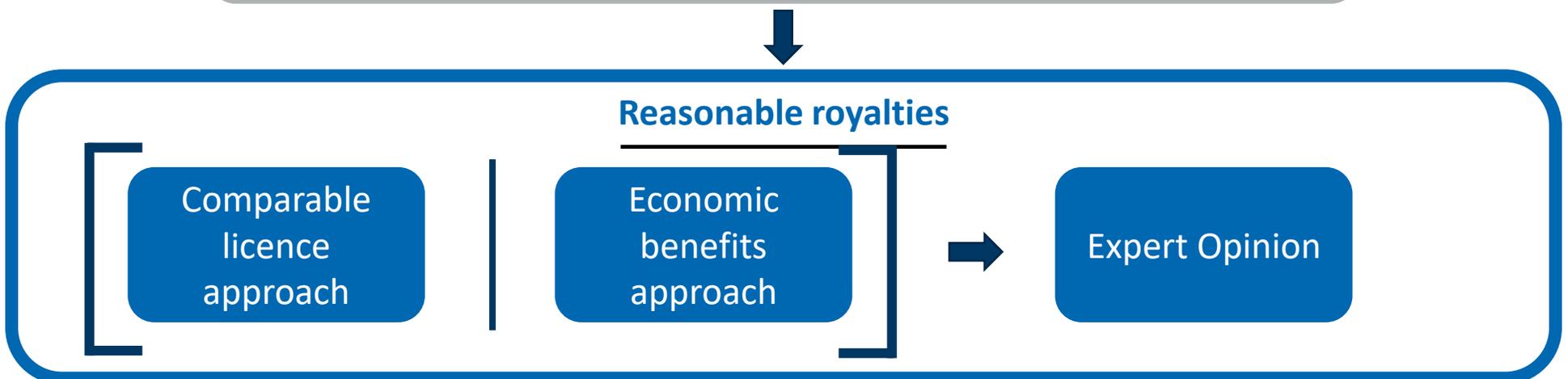
Reasonable royalties

Methods for estimating reasonable royalties

- **Economics benefits approach**

  - Estimate incremental value generated by use of the IP and how this value should be split between the IP and other assets directly

  - Discounted cash flow analysis

- **Comparables approach**

  - Use transactions (either sales or, more commonly, licences) as benchmark for the share of incremental value attributed to the IP

  - Transactions for ownership, transactions / licences for rights to use

  - Subject asset or a comparable asset

Incremental value can be directly estimated in some circumstances…

Example estimate of incremental value

- Technology to reduce costs by 5% each year
- Patent expires in 2025
- 2022 costs of GBP 100 million
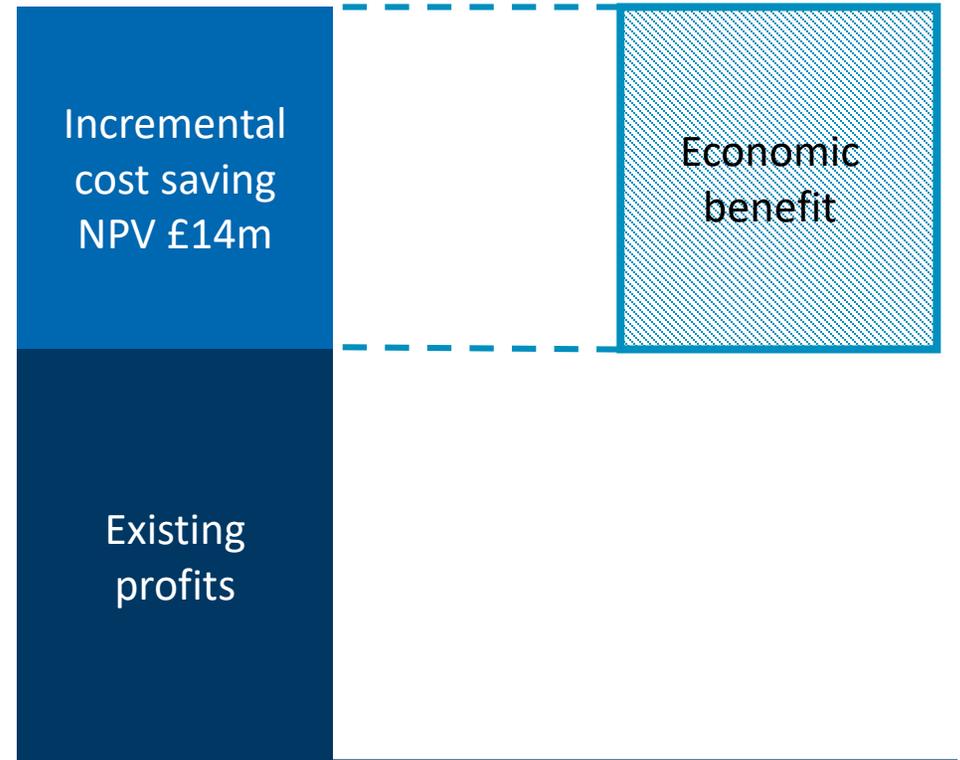- Total costs are expected to grow at 3% per year
- Discount rate of 8%

	2023	2024	2025
Total costs - without licence	£103m	£106m	£109m
Total costs - with licence	£98m	£101m	£104m
Incremental income	**£5m**	**£5m**	**£5m**
Discount factor	0.93	0.86	0.79
Present value	**£5m**	**£5m**	**£4m**
Value	**£14m**		

Illustration

Incremental cost saving NPV £14m
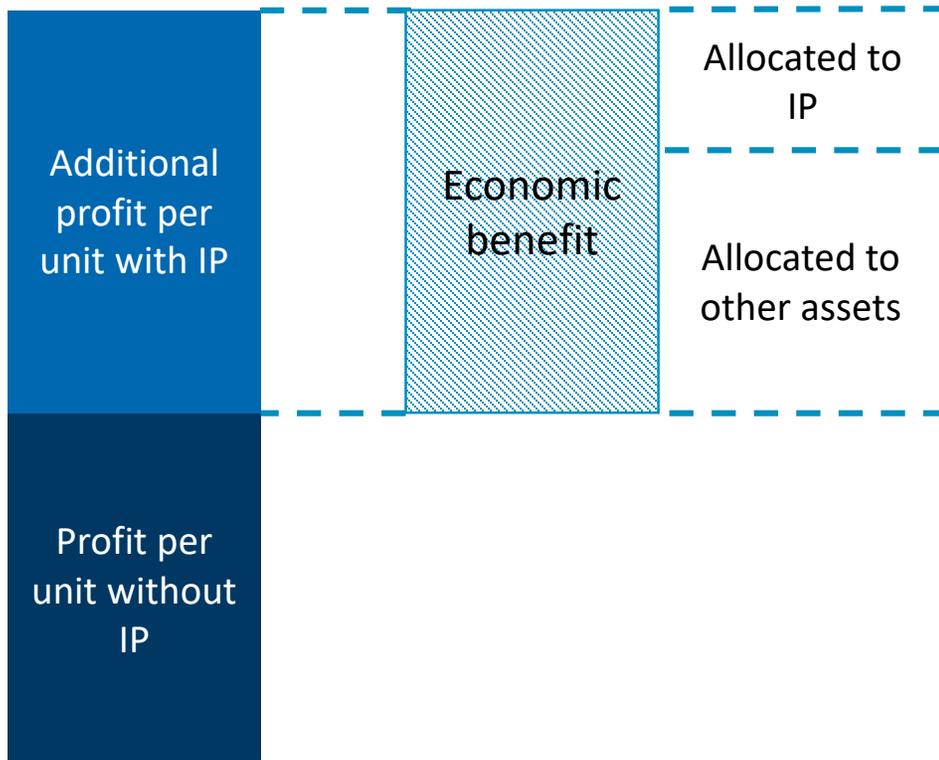
Economic benefit

Existing profits

…but incremental value is often difficult to estimate and uncertain

It is often more difficult to calculate incremental <u>benefits</u>:

- It may be difficult to isolate the incremental benefit from the IP asset

- The IP asset may be new and it may be difficult to estimate the benefits from using it

- It may be difficult to estimate the economic life of the IP asset

- It may be difficult to forecast the incremental income into the future

Allocation of economic benefits between the IP and other assets

Illustration

Additional profit per unit with IP

Economic benefit

Allocated to IP

?

Allocated to other assets
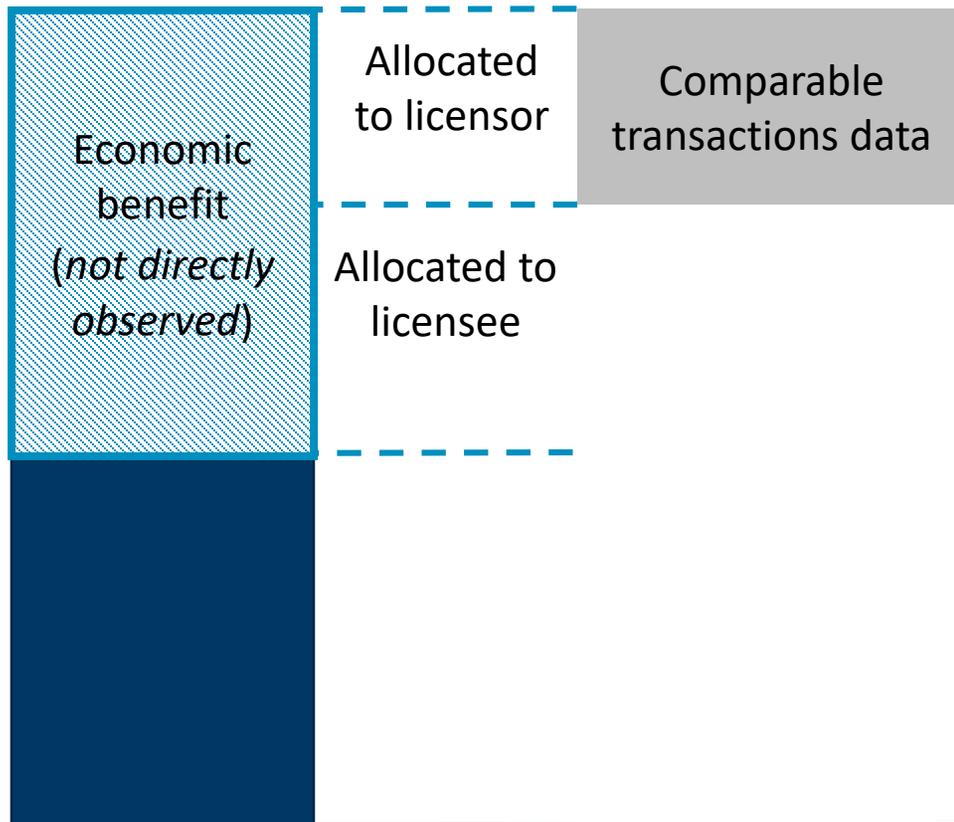
Profit per unit without IP

Issues

- Most difficult step in estimating IP value when using the economic benefits approach

- Rule of thumb is to allocate 25% to 33% of incremental value to the IP

The comparables approach relies upon 'real-world' data from actual transactions

Illustration of the comparables approach

Economic benefit (*not directly observed*)

Allocated to licensor

Comparable transactions data

Allocated to licensee

Method/Concerns with this approach

— Comparables data might contain only summary royalty terms

— Difficult to find truly comparable data

Assess comparability based on economically relevant characteristics