

## **Global IP Exchange**

Consideration for licensor's IP - valuation, royalties and other financial terms

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# Licensors' IP, valuation, royalties and other financial terms

## Agenda

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Introduction

Valuation of IP in various contexts – M&A, licensing, disputes, intragroup transactions

- Strategic context and typical valuation issues
- Valuation techniques
- Recent developments in IP valuation for intragroup transfers

Conclusions

Q&A

# Introduction

# What is value?

- It is certainly not just a price!

*"Price is what you pay. Value is what you get" – Warren Buffett*

- There are different aspects of value. Value to society may be different than value to an investor (externalities – positive or negative)
- The effort and investment in creating IP may have significant value for the creator of that IP... but this may not automatically translate in value to an investor
- On the other hand, there are "success stories" where the market success of IP can exceed many times the original investment
- IP is very important... but it does not generate value forever by itself. Businesses should remain focused on creating and protecting value on an ongoing basis
- Flexible negotiations and appropriate transaction structuring may unlock additional value for both parties in a transaction

**Valuation of IP in various contexts –  
M&A, licensing, disputes, intragroup  
transactions**

# Setting the scene

How/when does IP contribute to value creation?



## Sources of value

- Long term or short term?
- Growth or efficiency?
- Tangible vs intangible?
- “Hard” intangible (IP) vs “soft” intangible (customers, market footprint)?
- Existing assets or management team/workforce?
- “Riding the wave” (“beta” returns) vs “self-propelled” (“alpha” returns – beating the market)

## (Potential) IP strategic contexts

- Developing “young” IP (patents but also new brands)
  - Early stage acquisitions
  - R&D alliances/joint ventures (pharma)
- Applying existing IP in new sectors/markets
- Exploiting existing IP efficiently
  - Apple/Beats?
- Protecting against lawsuits/market share loss
  - Google/Motorola (mobile patent portfolio – defensive move)

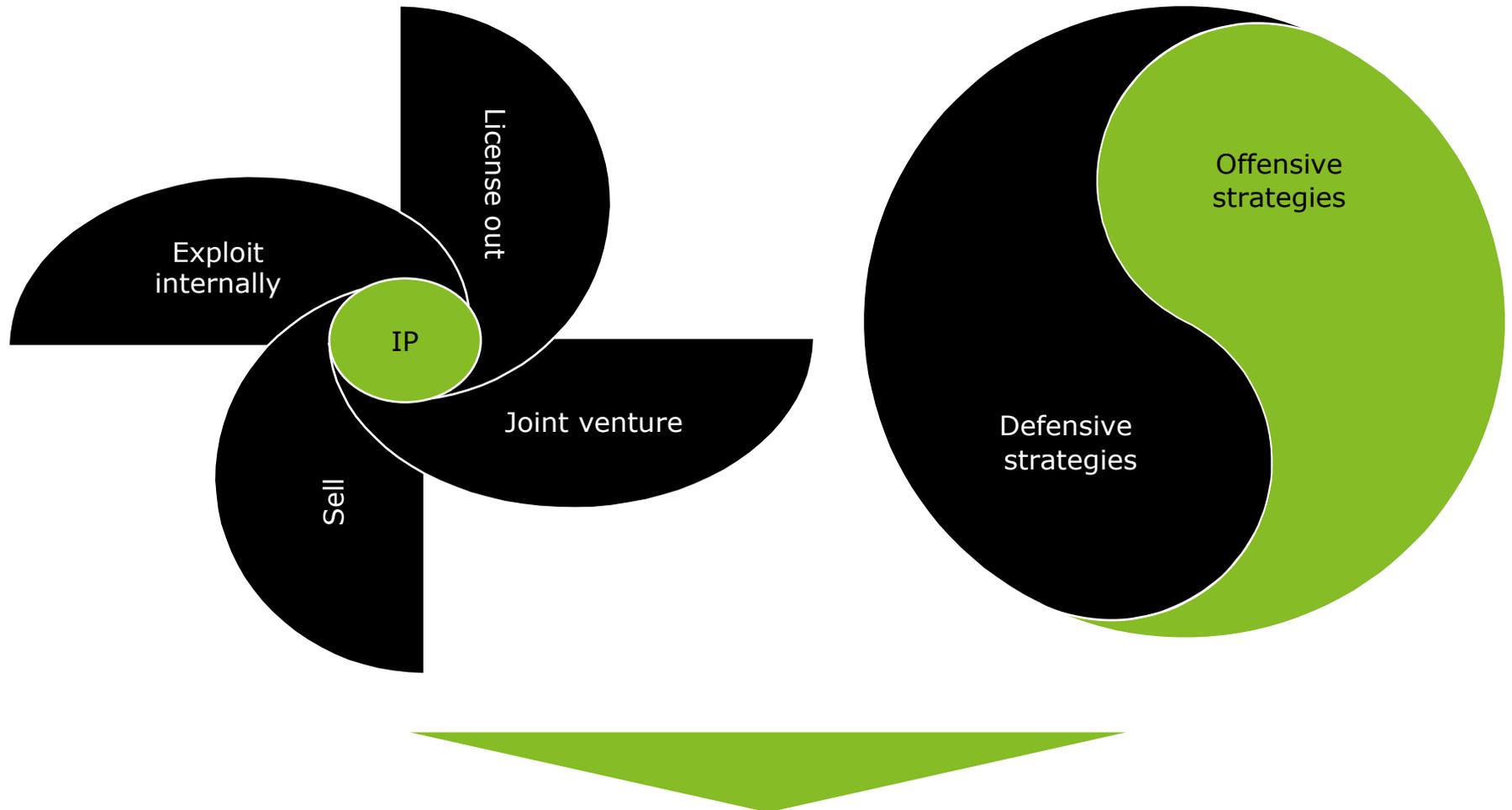
# Setting the scene

## When and why is an IA / IP value analysis needed?

### Value assessment / valuation – when?

- Business expansion strategies: may include organic growth, partnering, acquisitions, licensing etc. The IP assets of either partner may be part of the transaction and will affect its value
- Legal and tax business structuring: as a business grows, and following M&A transactions, the protection of IP assets and efficient structuring may require intragroup transactions with the assets, which in turn will require supporting valuations (contributions in kind, licensing, sale of assets, granting of tax incentives)
- Strategic investment decisions: may be based on investment analysis applied to IP assets or portfolios of such assets
  - Most relevant in IP-rich sectors – life sciences, technology, aerospace, luxury brands
- Purchase price allocation: required by US GAAP and IFRS – results in valuation of several intangible assets
- Disputes: e.g. infringement of IP rights
- Challenging the assumptions behind business valuations: possibly the least applied in practice but in our view a key issue

# IP – potential strategies



Context affects valuation approach and methodologies

# Valuation questions – before the “how”

## What are we valuing?

- Brand, patent, know-how or a combination?
- A single patent? Small number of patents covering the same product/process? Large collection of patents?
- Registered patent(s) or in the course of registration? Which territories?
- Non-patented technology/know-how? (Who knows the know-how?)
- A process technology or a final product technology?
- How are these protected?

Defining what you own or control and your rights to it is paramount

## Why does it need to be valued?

- Selling or sublicensing a technology?
- Decision between patenting and commercial secret?
- Attracting new investors?
- Business expansion? (eg brand licensing)
- Strategic review?
- Legal dispute? (Enforcing or defending IP rights)
- Intragroup transactions?

The purpose of the valuation matters

# IP valuation issues

## IP value mathematics

### **"1 - 1 = 1" ("non-scarcity")**

- You can "sell" (license) an IP asset and still have it
- Hence, to value the asset, one needs to consider all sources of value (own operations, licensees, sublicensees, etc)
- However, avoid double-counting (pay attention to exclusivity clauses!)

### **"1 = 2 = 3" ("scalability")**

- The same IP asset can have a different value in one business compared to another
  - E.g. A cost-saving process technology used by a manufacturing firm with €50m turnover vs. the same technology used by a firm with €1bn turnover
- How should scalability be valued?
- How should alternative uses be valued?

### **"100 > 1+1+1...+1 (100 times)" ("size matters")**

- Large patent portfolios allow different strategic options (e.g. Google/Motorola)

# IP valuation issues

## IP value mathematics

**" $x+y+z+t+u+v+w = 100.... z=?$ "**

- In **most** cases, IP assets do not generate value by themselves
  - Direct licensing out is an exception!
- The aim of valuation techniques is to isolate the value added by the IP asset in the overall business value

**" $1 + 1 + 1 = 10$ " ("the network effect")**

- Some intangibles have significant returns to scale if they can become sector standards, or the dominant network (e.g. Facebook) – great news if you are the standard, but a significant market barrier when you're the newcomer
- In the attempt of becoming the "standard", some companies take unconventional approaches: eg Tesla giving away their patents  
( $1-1 = 10?$ )

**" $1 (+ 1 + 1) = 0$ " ("show me the money")**

- No matter how strong the (technology) IP, there needs to be a financial story to support its value

# IP valuation issues

## More IP value “science”

### IP value “physics”

- Value (in)stability
  - IP value can be created AND destroyed quickly
  - BUT some IP value endures beyond the business that created it (e.g. many auto industry brands)
- Better may not always mean more valuable
  - Betamax, OLED... your examples?

### IP value statistics: “10% \* 10 + 90% \* 0 = 1”

- In early-stage IP, particularly technology, valuation is a game of probabilities - the value will be a weighted average of several future scenarios, often wildly different

### IP value “psychology”

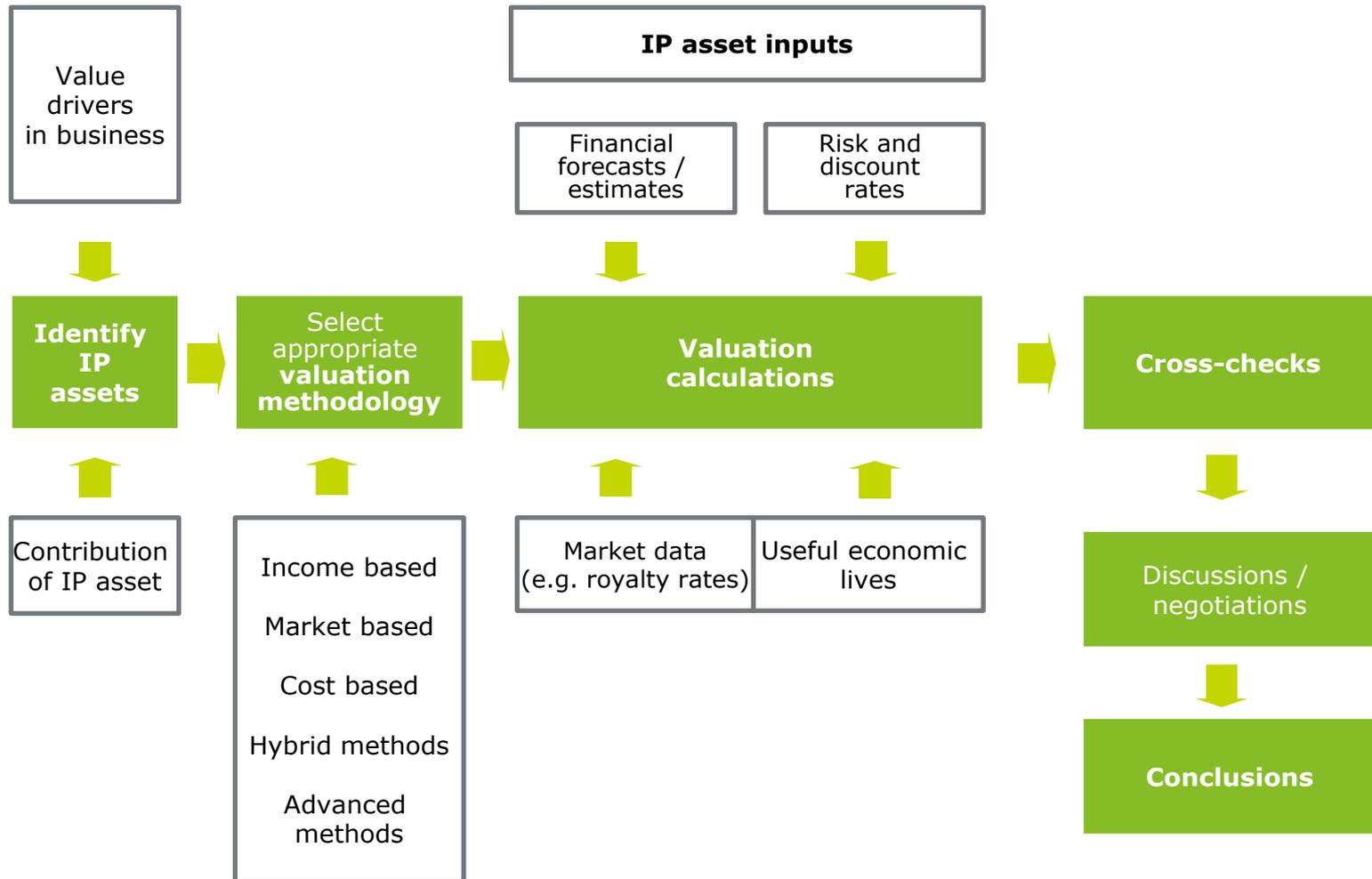
- Perspectives – how full is the glass
  - Inventor perspective: “It’s ready, all you have to do is sell it”
  - Investor perspective: “That was the hard part. Now comes the really hard part”

### IP value philosophy

- Is there such a thing as market value for IP?
  - The definition of market value requires the existence of an open market with several participants, which are well-informed and equally willing to transact
  - Is there always a market?
  - What happens if the value of technology is usually context-sensitive?

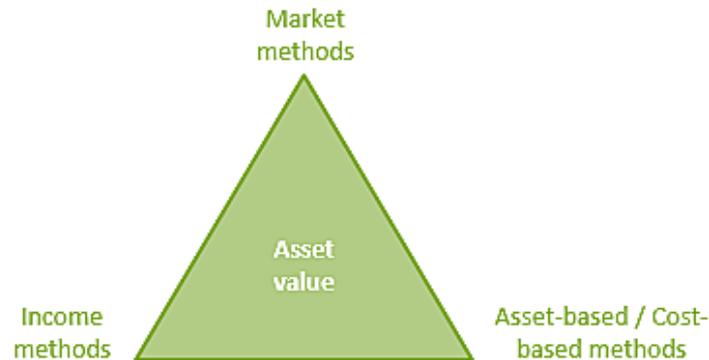
# Valuation techniques

# Overall approach to valuation



# Valuation methodologies

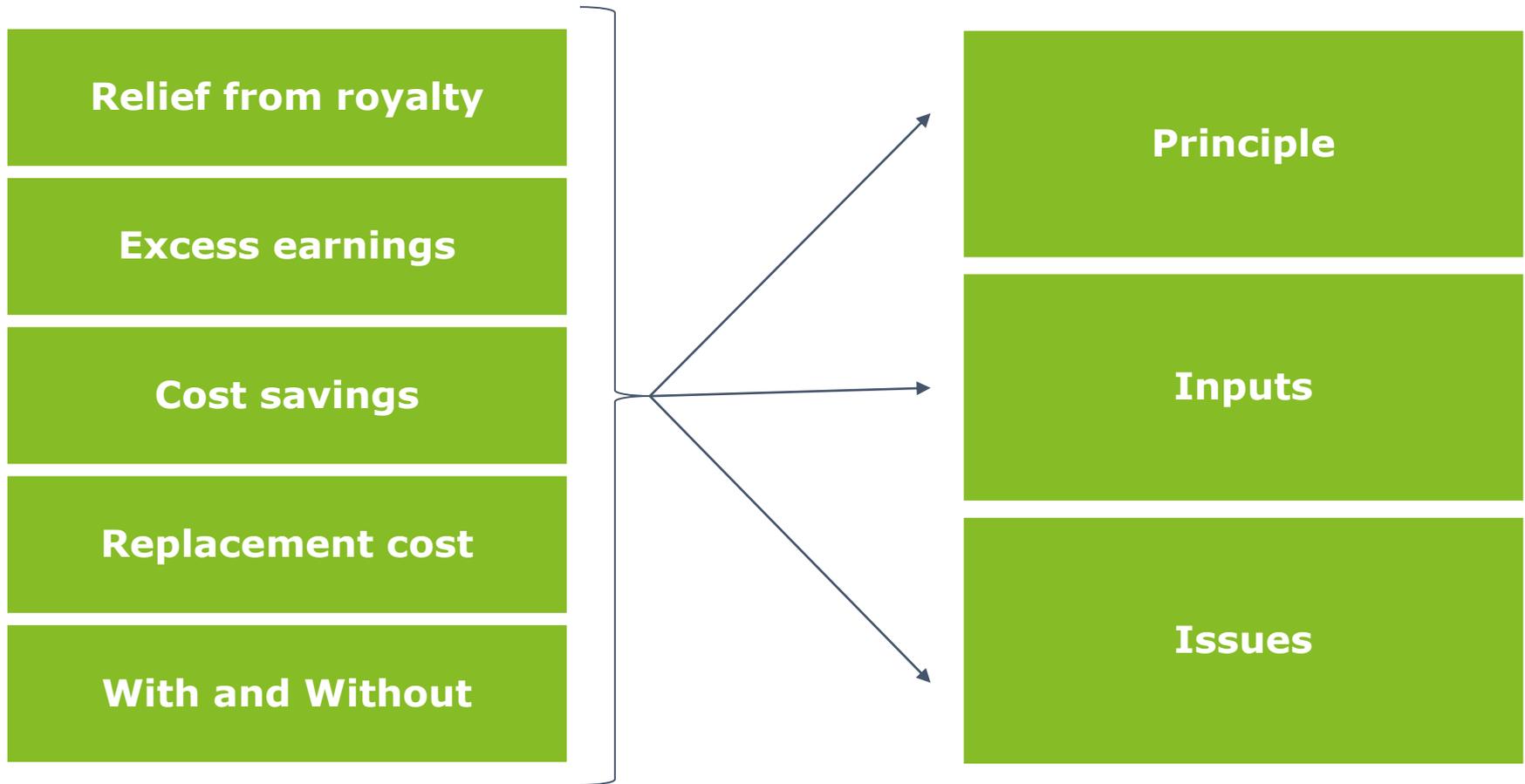
Valuation practitioners attempt, where possible, to **estimate value using several approaches**, in a triangulation process as set out below:



- Accounting standards may impose a preferred valuation approach. Under IAS, the most reliable approach to valuing intangible assets is to use **market-derived prices**.
- However, there are **few active markets for intangible assets**.
- The principal valuation methodologies are usually **income-based** (or hybrid methods). These methods rely on projecting cash flows relating to the intangible assets and discounting these cash flows to estimate the value of the asset.
- **Replacement cost** may also be an appropriate method to value some of the intangibles.

# Intangible assets – Valuation approaches

The following slides elaborate on five valuation approaches:



# Income approach

## Relief from royalty – Principle & Inputs

Relief from royalty is considered as an **income approach** or also a **hybrid approach** as it typically uses market data to estimate notional royalties.

### PRINCIPLE

- Economic theory of deprival - the value of an asset is what a company would pay for the right to use that asset if it did not own it
- It measures the fair value of the intangible asset through the projected cost savings of not having to pay royalties for use of the asset, under a licensing transaction
- Hypothetical royalties, typically based on a % of sales, are projected over the useful life of the asset
- Commonly used for assets which are subject to licensing transactions, such as **trade names / trade marks (brands), patents and unpatented technologies / know-how**

### INPUTS

| Inputs required                         | Where to find?             |
|---|----------------------------|
| Forecast revenues related to intangible | Provided by the Management |
| Royalty rate                            | RoyaltyStat & others       |
| Tax rate                                | Corporate tax rate         |
| Discount rate                           | To be calculated           |

# Income approach

## Relief from royalty – Issues

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### ISSUES

- Royalty rates may vary in a wide range
  - Licensing transactions with comparable assets, for which public information is available, may be difficult to find
  - The value of an owned asset may exceed the value of a licensed asset, as owners have additional options
  - Such additional options are difficult to value
- 

Note: where the asset valued is a technology licensed out by the company, a “direct” discounted cash flow approach may be used, with forecast cash flows being the difference between expected royalty income and any costs related to the agreement (administrative costs, technical support, etc.)

# Income approach

## Excess earnings – Principle & Inputs

### PRINCIPLE

- Based on the theory that economic returns, beyond those attributable to net tangible assets, can be derived from certain intangible assets of a business and can be isolated in a valuation
- Approach: comparing the return on capital using intangible assets with return on capital when not using the respective intangibles
- Commonly used for customer assets (contracts and relationships) and supplier relationships. Can be used for certain technologies
- Alternative method: premium profits (similar approach but with a P&L rather than a B/S focus) – more commonly applied for technology, patents, brands, etc. which can generate “super profits”.

### INPUTS

| Inputs required   | Where to find?  |
|---|---|
| Forecast revenues related to intangible                                       | Provided by the Management                                |
| Forecast earnings related to these revenue                                    | Provided by the Management                                |
| Fair values of other (in)tangible assets contributing to revenues / earnings  | Estimated based on information provided by the Management |
| Fair returns on other (in)tangible assets contributing to revenues / earnings | To be calculated  |
| Tax rate  | Corporate tax rate  |
| Discount rate   | To be calculated  |

# Income approach

## Excess earnings – Issues

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### ISSUES

- The inputs required are detailed
  - Assumptions about returns on other assets can affect the valuation significantly
  - ‘Theoretical’ approach – assumes there is an efficient market for other assets, and that these assets could easily and costlessly be redeployed in the next best alternative use
  - Can only be used for valuing one (“residual”) intangible asset contributing to a certain stream of revenues
-

# Hybrid approach

## Cost savings – Principle & Inputs

### PRINCIPLE

- Hybrid form of the income and cost approaches
- The value of an intangible asset is equal to the present value of the forecast cost savings that it can generate for the company using it
- The underlying assumption is that the final products / services are of a similar standard, i.e. the cost savings do not influence quality negatively
- Commonly used for technology assets (in particular unpatented technology)

### INPUTS

| Inputs required   | Where to find?          |
|---|-------------------------|
| Forecast costs (unit costs, total costs) for the company using the asset (technology) | Estimated by Management |
| Forecast costs for a typical company not using the asset                              | Estimated by Management |
| Tax rate  | Corporate tax rate      |
| Discount rate   | To be calculated        |

# Hybrid approach

## Cost savings – Issues

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### ISSUES

- Detailed cost information on competitors might be difficult to obtain
  - The same asset may generate a certain volume of cost savings in the acquired company and may be used in a much larger company (e.g. the acquirer, or a competitor) to generate significantly higher cost savings - this makes it difficult to estimate the fair value of the asset (the value of the asset may be higher than the value of the company acquired)
-

# Cost approach

## Replacement cost – Principle & Inputs

### PRINCIPLE

- Principle: if an asset can be replicated, in the absence of significant legal / economic barriers to re-creating the asset, its fair value will not exceed the cost of re-creating it
- Basis: replacement cost is the most appropriate basis, but historical cost can also be used as a proxy
- Commonly used for assets which can be re-created relatively easily: databases, certain contracts (which do not provide material advantages compared to market terms), software (see also further below)

### INPUTS

| Inputs required  | Where to find?          |
|--|-------------------------|
| Historical cost incurred in developing the asset<br>- Time & expenses incurred by management/employees<br>- Acquisition costs<br>- Other expenditure | Estimated by Management |
| Estimate of time and cost to re-create the asset<br>- Historical cost can be used as a proxy<br>- Variations from historical cost                    | Estimated by Management |
| Tax rate   |                         |

# Cost approach

## Replacement cost – Issues

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### ISSUES

- The method is only applicable in a limited set of circumstances, where a similar asset to that valued can be re-created. For instance, it would not be applicable in valuing a patent, or most trade marks
  - Where the asset can be re-created, the period in which this can be done is important. In certain cases, the time-to-market is essential and a delay could result in significantly lower earnings (e.g. being first to market with a software platform)
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# Hybrid approach

## With and Without – Principle, Inputs & Issues

### PRINCIPLE

- It estimates the value of the subject intangible asset by comparing the value of the business WITH the subject intangible asset in place, to the hypothetical value of the business WITHOUT the subject intangible asset in place.
- Commonly used for: technologies, non-competition agreements, franchises.

### INPUTS

| Inputs required                  | Where to find?            |
|----------------------------------|---------------------------|
| Forecast cashflows with asset    | Provided by the Mangement |
| Forecast cashflows without asset | Provided by the Mangement |
| Tax rate                         | Corporate tax rate        |
| Discount rate                    | To be calculated          |

### ISSUES

- Quantifying the incremental benefit can be difficult and subjective
- Supporting an appropriate discount rate to reflect the impact of the absence of the subject intangible asset on the enterprise can be difficult
- Ascertaining probability of competition in case of assets such as NCA is more or less subjective

# Selecting a valuation methodology

There are three main questions to ask when selecting a valuation methodology:

- 1 • How does the asset create value?
- 2 • Is this type of asset subject (individually) to licensing or other transactions between third parties?
- 3 • What methods are typically used for valuing such assets?

The following considerations may be relevant (not mutually exclusive nor exhaustive):

| Reasoning   | Method  | Examples   |
|---|---|--|
| The asset enables the business to charge a premium price (e.g. consumer brands, new technologies) | <ul style="list-style-type: none"> <li>Premium profits method</li> <li>Excess earnings method</li> <li>With and Without method</li> </ul> | Consumer brands, new technologies                      |
| The asset saves costs   | <ul style="list-style-type: none"> <li>Cost savings method</li> <li>With and Without</li> </ul>   | Technology   |
| The asset generates a predictable earnings stream   | <ul style="list-style-type: none"> <li>Excess earnings method</li> <li>Direct DCF</li> </ul>  | Customer contracts or relationships, or licence income |
| This type of asset is or could be subject to licensing transactions                               | <ul style="list-style-type: none"> <li>Relief from royalty method</li> </ul>  | IP assets such as patents or brands / trade marks      |
| The asset can be recreated quickly, to a similar standard / performance                           | <ul style="list-style-type: none"> <li>Replacement cost method</li> </ul>   | databases, software, certain contracts                 |

# Discount rates in income methods

Discount rates should reflect applicable risk factors (unless included in the financial forecasts)

- Usually **related to the cost of capital of the underlying business**
- In certain cases, it is possible that the discount rate for the business will have only limited relevance for an intangible asset (e.g. a new business using well-established technology). This, however, is usually the exception.
- Typically, **discount rates for intangible assets are considered to be higher than the discount rate / cost of capital for the business.** This is due to the higher risks of intangible assets (obsolescence, infringement, etc.). Goodwill is typically considered to be the riskiest asset.

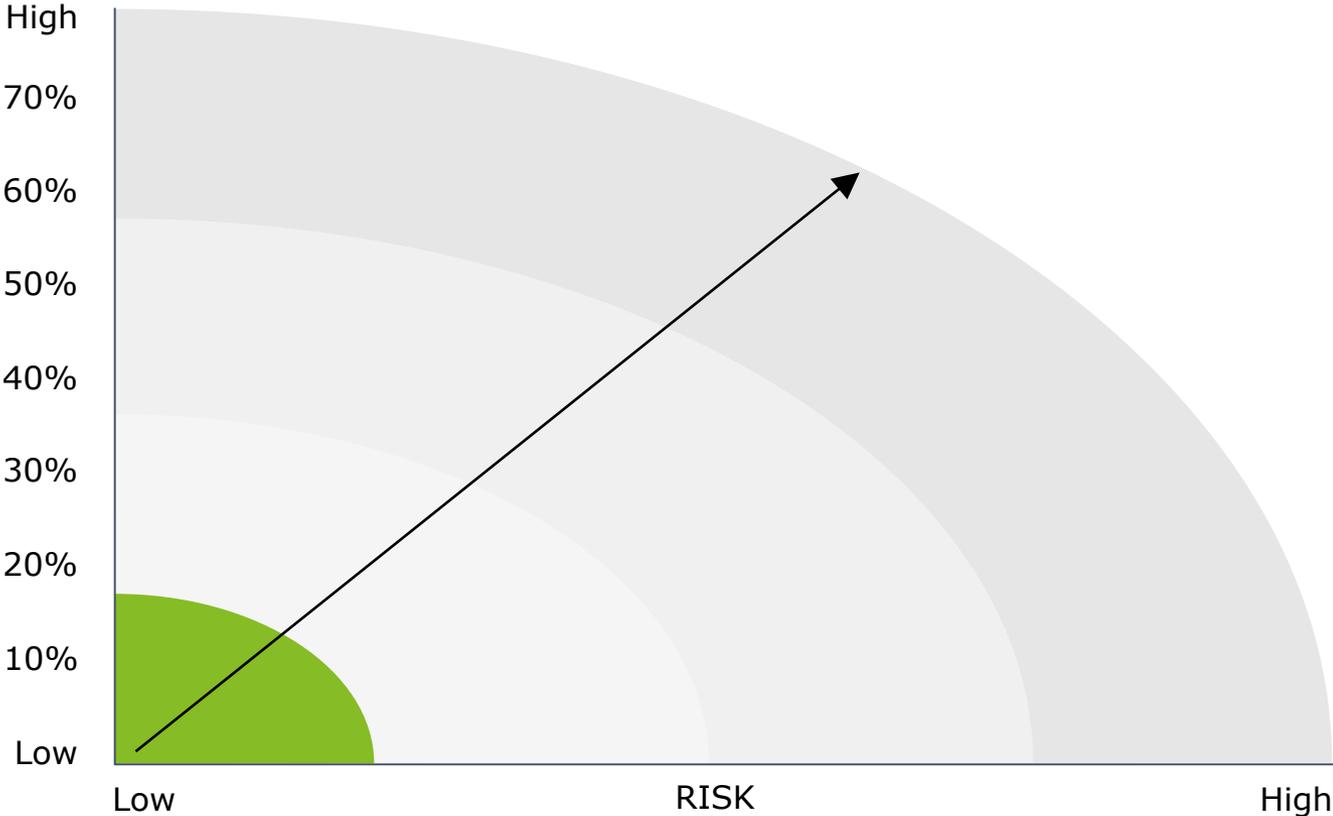
## GENERAL CONSIDERATIONS



**Premia** for identifiable intangibles discount rates are often in the **range 1% - 5% over the discount rate for the business**

# Discount rates

Discount rates should reflect applicable risk factors

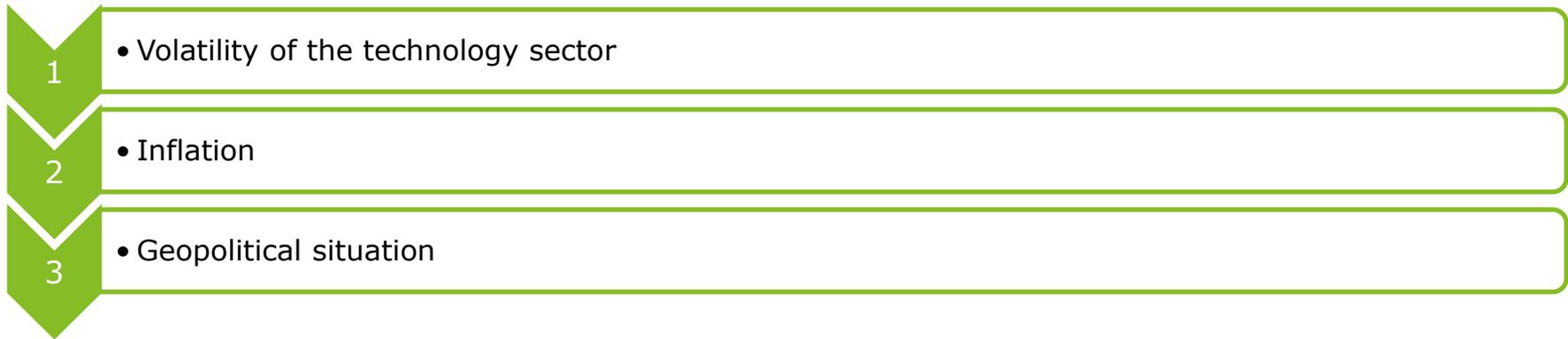


|             |                 |   |           |
|-------------|-----------------|---|-----------|
| Product:    | Existing        | → | New       |
| Technology: | Well-understood | → | Unproven  |
| Demand:     | High            | → | Not known |

# **Current market events impact on IP Valuations**

# Current market events impact on IP Valuations

Current business context and macroeconomic events may significantly impact IP valuations:



The following considerations may be relevant when assessing this impact:

| Input                | Impact on input  |
|----------------------|--|
| Business plan        | <ul style="list-style-type: none"> <li>• Inflation impact</li> <li>• Cost structure shift</li> <li>• Shifts in potential markets and market demand</li> </ul>                    |
| Discount rate        | <ul style="list-style-type: none"> <li>• Expect differentiated impact on WACC depending on valuation date, sector and company performance</li> </ul>                             |
| Economic useful life | <ul style="list-style-type: none"> <li>• Sectoral / macro economic changes: Game changers</li> <li>• Technology disruption</li> <li>• Supply chain structural changes</li> </ul> |
| Royalty rate         | <ul style="list-style-type: none"> <li>• Long term growth estimates</li> <li>• Profitability decrease?</li> <li>• Permanent or temporary effect?</li> </ul>                      |

# **IP valuation in intragroup transactions (transfer pricing context)**

# Key Discussion Points

## Similarities and differences between valuation of IP for TP and non TP purposes

There are key similarities between valuation of IP/ intangibles for commercial, financial reporting and dispute purposes on one side, and TP purposes on the other side:

### Similarities

- Significant similarities in definition of intangibles
- Significant similarities in valuation approaches used (despite variations in terminology and detail of methods)
- Broad similarities in data sources

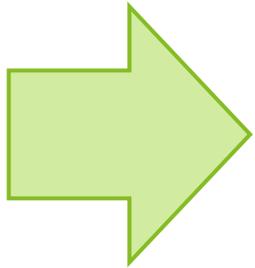
There are also key differences that may affect the identification of the intangibles, the perimeter of the valuation, the conclusion of value and the documentation required:

### Differences

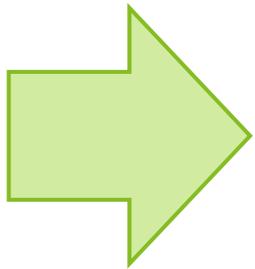
- Market value / fair value vs Arm's length principle (ALP)
- Treatment of goodwill
- Two-sided requirement in TP
- Structure of the functional/economic analysis
- Detail of analysis of valuation inputs

# Key Discussion Points

## Similarities and differences between valuation of IP for TP and non TP purposes (2/2)



- Best practice is for valuation and TP practitioners to collaborate on valuation of IP for TP purposes



- Tax authorities are increasingly aware of IP valuation issues in TP, but still lack technical resources and manpower to address these in detail. This may change in the near future!

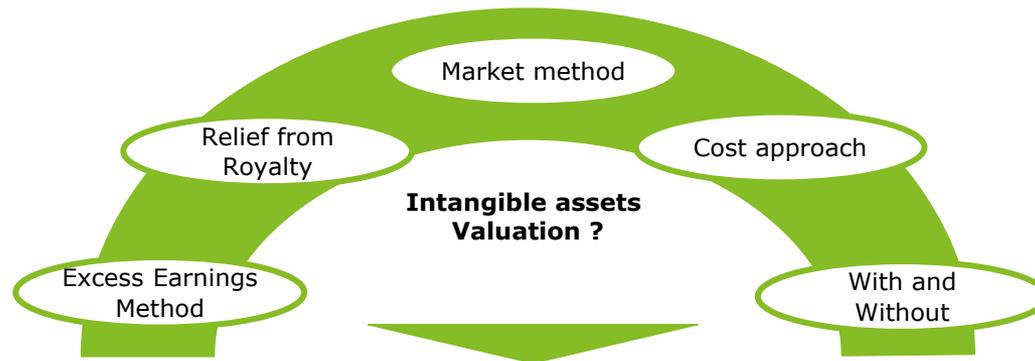
# Conclusions

# Conclusion – valuation issues to address

The nature of some investments makes it more difficult to analyse them with traditional financial models

What makes IP assets so difficult to analyse?

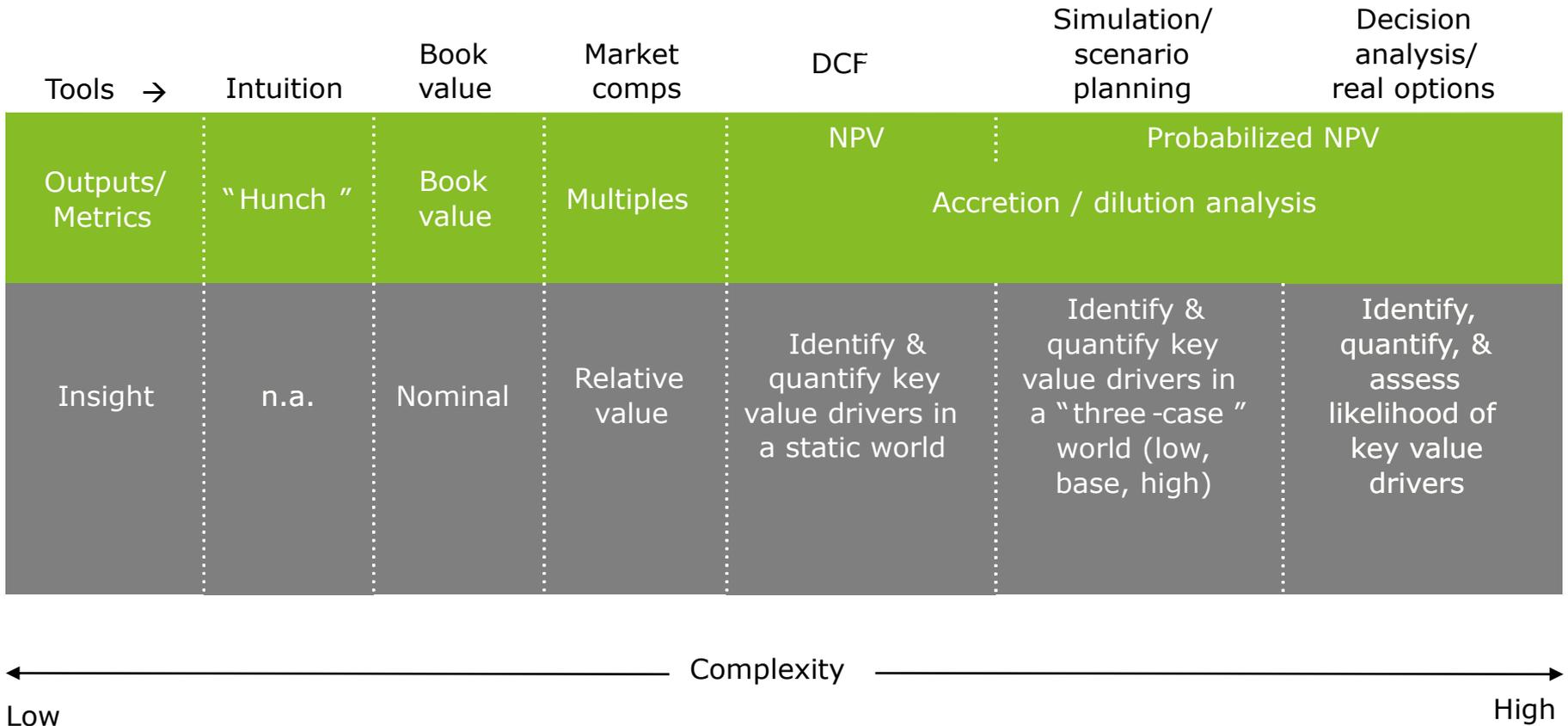
- The relationship between costs and value is often weak (significant fixed development costs and uncertain returns)
- Scalability of value (the same asset may have a different value when used by a large business compared to a small one)
- Value can be eroded quickly (e.g. through IP infringement) – protecting the assets is crucial
- Rapid scientific and technological change
- Unpredictability of the success of a new technology
- Serial learning creates problems for traditional valuation methods



For certain intangible assets, more flexible methods or a combination of methods would more appropriately reflect the value of the assets.

# Conclusion – choice of methodology

Once the drivers are framed, “choose your weapon” for uncertainty. Sophisticated tools provide insight, help navigate... but require skill.



# Conclusion – link between valuation and strategic context

There is no single value across different situations and periods

## Things to remember

- Is there a need for valuation? Certain transactions (e.g. licensing) do not require a full valuation
- There may be no real market: value may depend on intended use and on the user
- Negotiations can be multifaceted: create value for all parties by focusing on the specific characteristics of intangible assets (non-scarcity, scalability)
- Portfolio effect: a large patent portfolio creates “synergies”
- Value may change rapidly in both directions
- Flexibility: there’s more to IP transactions than buy/sell/license
- Patenting vs commercial secret decision
- Protect your IP – both actively / strategically and defensively

# How Deloitte can help

## Contact details

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**Q&A**



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