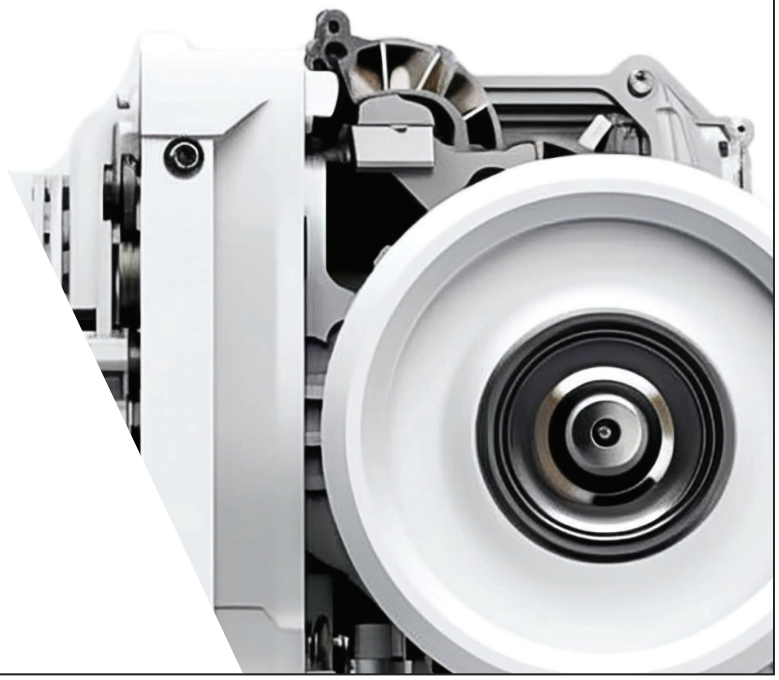
Quantifying IP Value – Practical Guide and Case Studies



DAVIES COLLISON CAVE

CPD Day 2026

12 March 2026

Jack Shan, CFA (DCC, QANTM Valuations)
Patent attorney and valuation specialist

Applications of IP Valuation

Useful tool for decision makers, financiers and deal negotiators

Disputes and compliance

- Disputes and damages
- Purchase Price Allocations
- Financial reporting
- Tax planning and compliance
- Re-restructuring
- Fairness opinions
- Transfer pricing

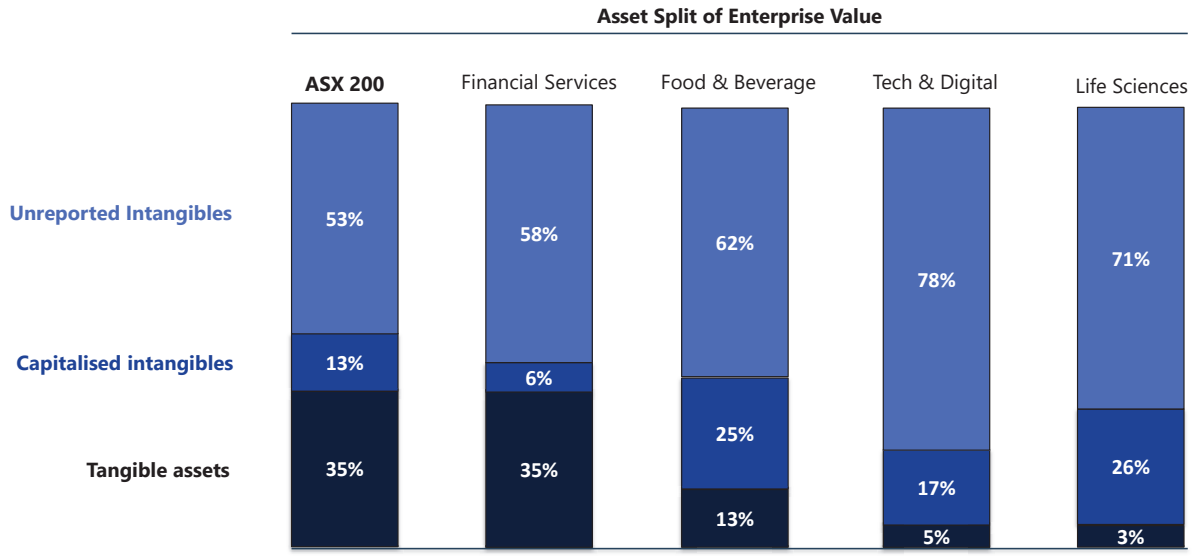
Transactions

- Capital raise
- IP financing
- Divestments, exits, IPO
- Joint ventures
- M&A (buy & sell sides)
- Transaction and diligence
- Licensing negotiations
- Liquidation

Governance

- Monitoring returns on IP Investments
- Strategic management
- Board and shareholder reporting
- Governance and board decisions
- Business case assessment

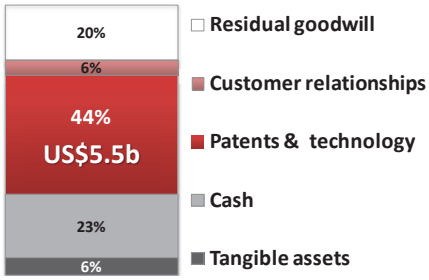
Australian perspective



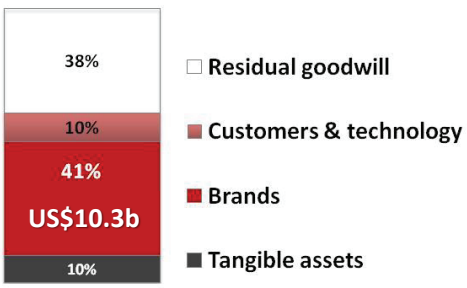
International examples

A closer look at IP transactions

USD 12.4b deal for Motorola



Kraft acquired Cadbury for USD 24.9b



Overview of Standards for Valuing Intangible Assets

International Valuation Standards (IVSC)

Royal Institution of Chartered Surveyors (RICS)

Organisation for Economic Cooperation and Development

Accounting Professional & Ethical Standards Board

International Organisation for Standardisation

International Financial Reporting Standards

Overview of Standards for Valuing Intangible Assets

International Valuation Standards (IVSC)

IVS 210 – Intangible Assets

> *"The valuation of an intangible asset requires the identification of the specific rights, privileges, or benefits accruing to the owner... The valuer must consider the purpose of the valuation, the basis of value, and the key assumptions."*

- The IVSC provides the authoritative global framework for valuing intangible assets, establishing principles that ensure consistency, transparency, and reliability across jurisdictions. IVS 210 specifically addresses patents, trademarks, technology, and other IP assets, providing clear guidance on appropriate methodologies and acceptable practices.

Royal Institution of Chartered Surveyors (RICS)

RICS Professional Standards

> *Provides mandatory practices for valuation professionals, ensuring a clear, transparent, and defensible approach trusted in high-stakes transactions.*

- **Clear methodology requirements** ensuring appropriate approach selection and application.
- **Comprehensive reporting standards** that create transparency and allow third parties to understand and verify the analysis.
- **Professional conduct requirements** that ensure objectivity and manage conflicts of interest.
- **Quality assurance protocols** that create confidence in high-stakes transactions.

Four recurring moments when valuation enters legal work

Where sophisticated IP teams most often need a number that is understandable, supportable and usable.

1 Licensing negotiations

- Royalty rate setting and range selection
- Defining the right, base, territory and term
- Benchmarking and negotiation leverage

2 Disputes and damages

- Reasonable royalty, lost profits or account of profits
- Apportionment, causation and evidence
- Expert reports that must withstand challenge

3 Transactions and diligence

- M&A, JVs, capital raises and contribution analysis
- What a buyer would pay — and why
- How IP quality changes price, structure and terms

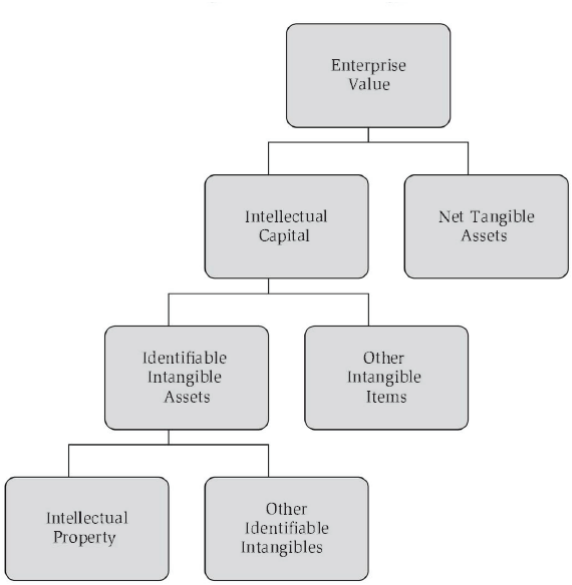
4 Governance and assurance

- Board reporting and value visibility
- Financial reporting, tax and restructures
- Asset discovery and defensibility of key assumptions

Common theme: the valuation has to be fit for purpose, evidence-based, and intelligible to the decision-maker.

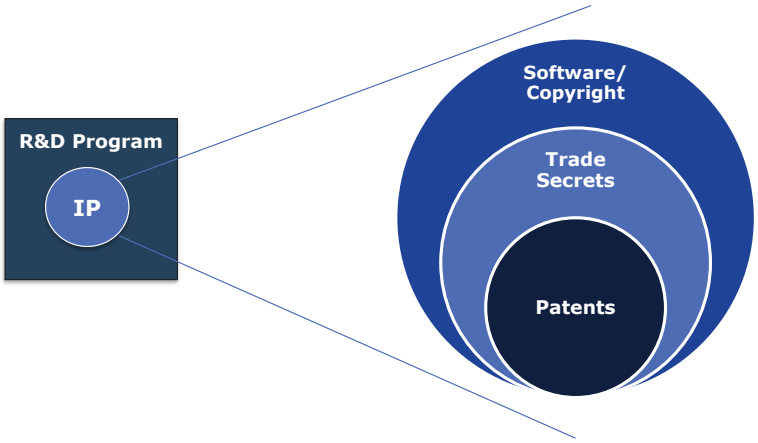
Asset definition: what exactly is the subject IP?

The Figure shows that IP rights are a subset of intangible assets, which in turn are a subset of an enterprise's total asset base.



Identifying the subject IP with specificity

What exactly is being valued?



Patent type(s)

- ✓ Product patents
- ✓ Formulation patents
- ✓ Method of treatment patents
- ✓ Diagnostic method patents
- ✓ Manufacturing process patents

Purpose, Premise and Basis of Valuation

The earnings generated by a particular IP right vary depending on the capabilities of the owner. Therefore, it is essential to determine whether an asset is to be valued from the perspective of the current owner (value in-use), a typical purchaser (market value), a specific purchaser (investment value), or an unwilling seller (liquidation value).

The purpose of the valuation will usually determine the appropriate premise of value. In most commercial situations, market value is the appropriate premise.

International Valuation Standards define market value as:

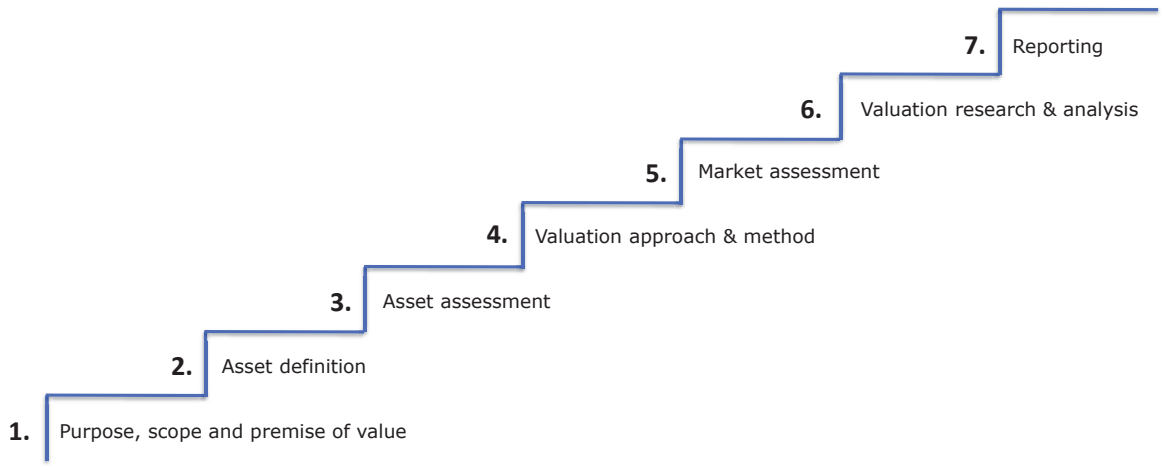
"The estimated amount for which an asset should exchange on the valuation date between a willing buyer and a willing seller in an arm's-length transaction, after proper marketing and where the parties had each acted knowledgeably, prudently, and without compulsion."

Typical basis by valuation purpose

Purpose		Typical basis of value	Audience	Methods that usually fit
Financial reporting (IFRS accounts, impairment, PPA under IFRS 3 or AASB 3)	What a market participant would pay at the measurement date for each identifiable intangible	**Fair Value** under IFRS 13, which IVS reproduces and recognises. Often Highest and Best Use as the premise	Auditors, boards	Market where good comps exist, otherwise Income. Cost as a ceiling or for software and data build.
Purchase Price Allocation (PPA)	Split the deal price over identifiable intangibles and goodwill	Fair Value per above. Also **Allocation of value** within the brand or tech bundle	Auditors, finance	Income approach variants: RfR for brands and copyrights, Multi-Period Excess Earnings for customers, relief-from-technology or incremental cash flow for patents, contributory asset charges for supporting assets
Exit or deal negotiations	What a typical buyer would pay, or what it is worth to *this* buyer	**Market Value** for a general auction outcome, or **Investment Value** if pricing synergies for a specific buyer	Corporate acquirers, vendors	Market multiples and comparable licences where available, triangulated with Income. Explain any buyer-specific synergies if using Investment Value
Tax and transfer pricing	An arm's length outcome between notional independents	Arm's length pricing. For royalties, the **Comparable Uncontrolled Price** logic and triangulation with Income	Tax authorities, ATO, IRAS, OECD	Royalty benchmarking combined with incremental earnings and profit-split analysis

Components of IP Valuation

How valuation gets built

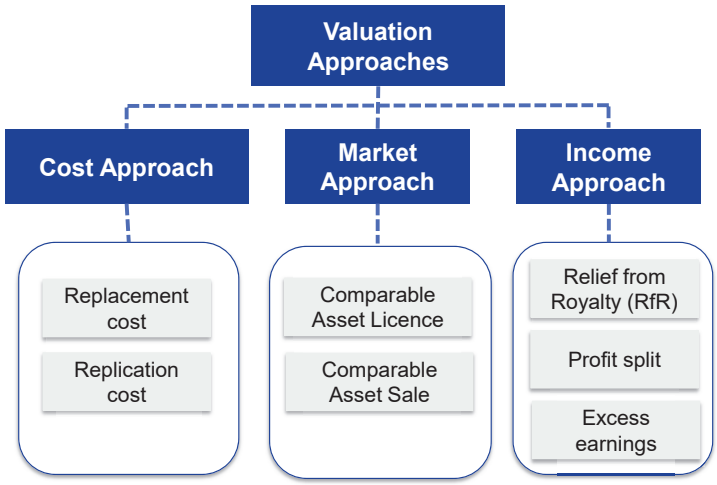


Anatomy of Valuation

Standards-compliant best practice

Asset Mapping	Basis & Premises	Application	Research & Analysis	Model Construction	Verification & Delivery
Patents	Market value	Capital raise	IP characteristics	Panel review	Test assumptions
Trade Marks	Investment value	IP Financing	Product review	Question linkages	Reporting writing
Designs	Liquidation value	Exits | IPO | JV	Market research	Select approaches	Affidavit
Copyright	Fair value	Licensing	Gap analysis	Residual earnings	Court appearance
Software	Going concern	Insolvency	Independent verification	Profit split method	
Data	Transfer pricing	Litigation	Tech-specific metrics	Relief from royalty	
Know-how	Orderly disposition	PPA	Royalty rate benchmarking	Multi-period excess earnings	
Trade secrets	Forced liquidation	Financial reporting	Comparables research	Replacement cost	
Contracts		Tax compliance	Brand equity research	Sensitivity analysis	
Human capital		Fairness opinion	Limitations	Revenue forecast	
Plant & Equipment		Board reporting		Financial modelling	
		RoIP management		Cross-checks	

Valuation approaches & methodologies



Valuation approaches & methodologies

Market Approach

- Comparable transactions
- Benchmarking adjustments

Cost Approach

Replacement cost + Opportunity cost - Obsolescence Provision

Income Approach

DCF:

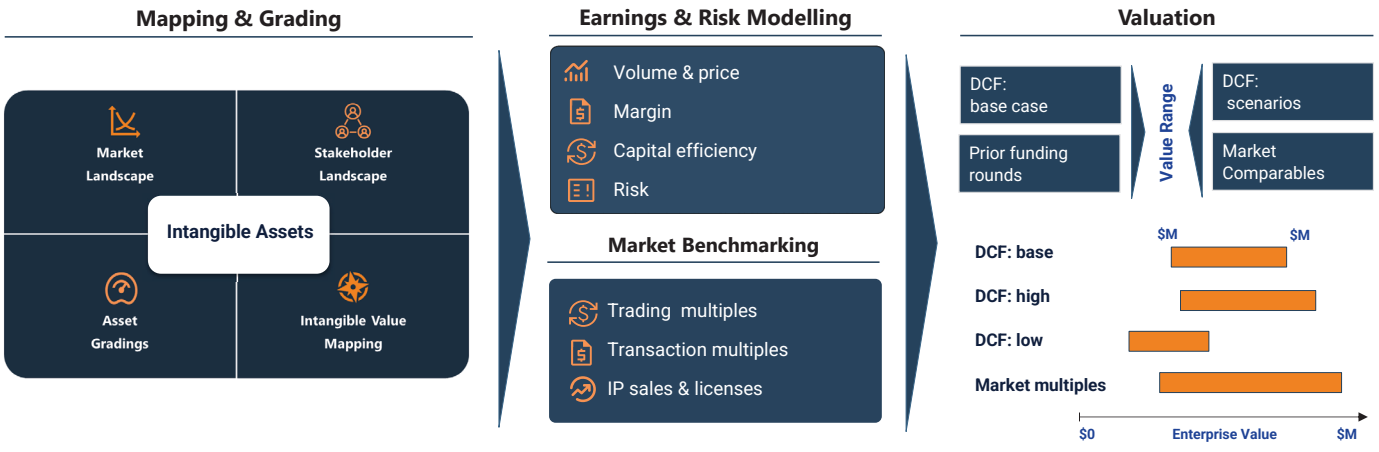
- Forecast IP earnings
- Forecast costs
- Risk
- Useful Life

Capitalised earnings:

Maintainable earnings X Market multiple

Model construction

Valuation approaches and applications depend on key inputs such as asset type, characteristics, technology sector, market, basis and premise, stage of development, and availability of information



Valuation methods by IP asset type

Asset Type	Economics	Primary method	Typical base	Useful cross-checks	Qualitative factors
Trade marks and brand logos	Help sell more at the same price, support a price premium, reduce customer acquisition cost	**RfR**. Royalty rate set by triangulating comparable licences, incremental profits and profit split	Branded revenue in relevant channels and territories	Market comps for similar brands and scope; profit-split vs routine returns	Legal strength and coverage, distinctiveness, brand equity, marketing support, economic life and refresh cycle.
Copyright in artwork and software code	Right to reproduce, display or embed in products	**RfR** for logo and content copyrights, or **incremental** for code features	Revenue of the usage that depends on the right, or measured feature uplift	Cost ceiling from modern equivalent build; comps where available	Authorship and chain of title, separability from the trade mark, scope of permitted use, piracy risk, economic life.
Patents	Enable a feature or lower unit costs that competitors cannot legally copy	**Incremental cash flow** or **profit split** where multiple intangibles interact	Product margin uplift or cost saving attributable to the claims	RfR implied from profit split; selective comps for similar scope and stage	Breadth and enforceability of claims, ease of design-around, detectability of infringement, remaining term vs economic life.
Registered designs	Aesthetic appeal that attracts buyers or allows premium pricing	**RfR** if designs are licensed, or **incremental** if premium can be measured	Sales of SKUs using the design	Market comps from design licensing; cost ceiling for redesign	Scope and term of design protection, overlap with copyright, substitution risk.

Royalties in practice

Relief from royalty (RfR) calculation example

Step 1: Determine forecast revenue

Step 2: Establish Royalty Rate Range

Step 3: IP Evaluation & Specific Royalty

Step 4: Determine the Discount Rate

Step 5: IP Valuation Results

		F06	F07	F08	F09	F10	F11
		$	$	$	$	$	$
Revenue	1	100	110	119	128	139	147
Growth Rate			*5.0%*	*8.0%*	*8.0%*	*8.0%*	*6.0%*
Notional royalty rate	2 3			*3.5%*	*3.5%*	*3.5%*	*3.5%*
Brand earnings stream				4.2	4.5	4.8	5.1
After tax brand royalty				2.9	3.1	3.4	3.6
Present value of brand royalty				2.7	2.7	2.6	2.6
Discount Factor	4			*1.09*	*1.18*	*1.29*	*1.40*

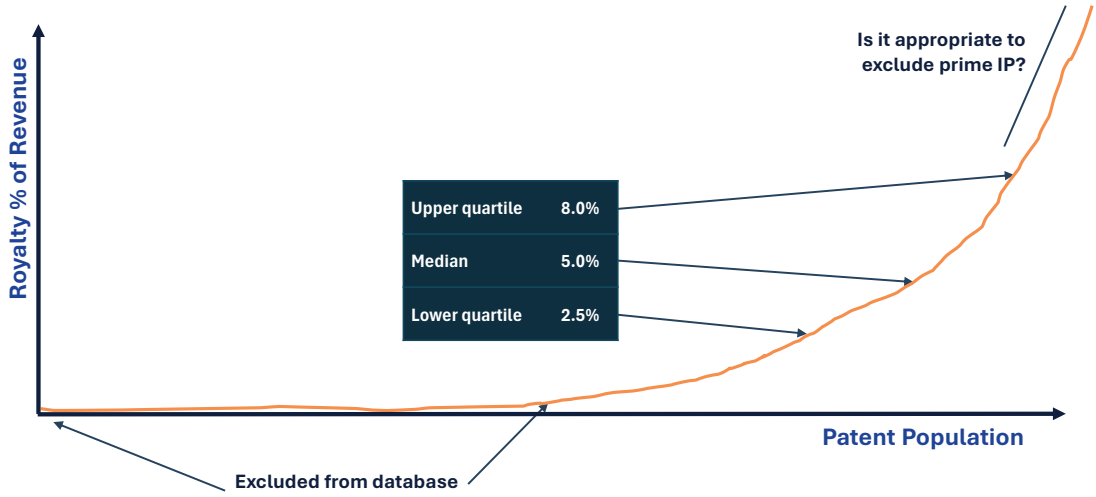
$$\sum_{t=1}^{T} \left\{ \frac{[\text{Sales Revenue}_t * \text{Royalty Rate} * (1\text{-Tax})]}{(1+ \text{Discount Rate})^t} \right\}$$

5	$
Value generated in forecast period	10.5
Terminal value	42.2
Total Value	**52.8**

Royalties: why averages mislead

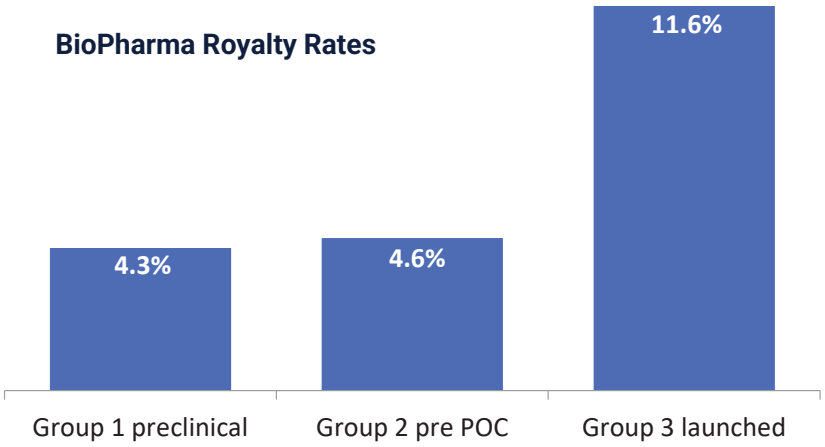
Royalty rate assessment is also dependent on quality of underlying IP assets

Beware of simplistic analysis and taking averages



Royalties: why averages mislead

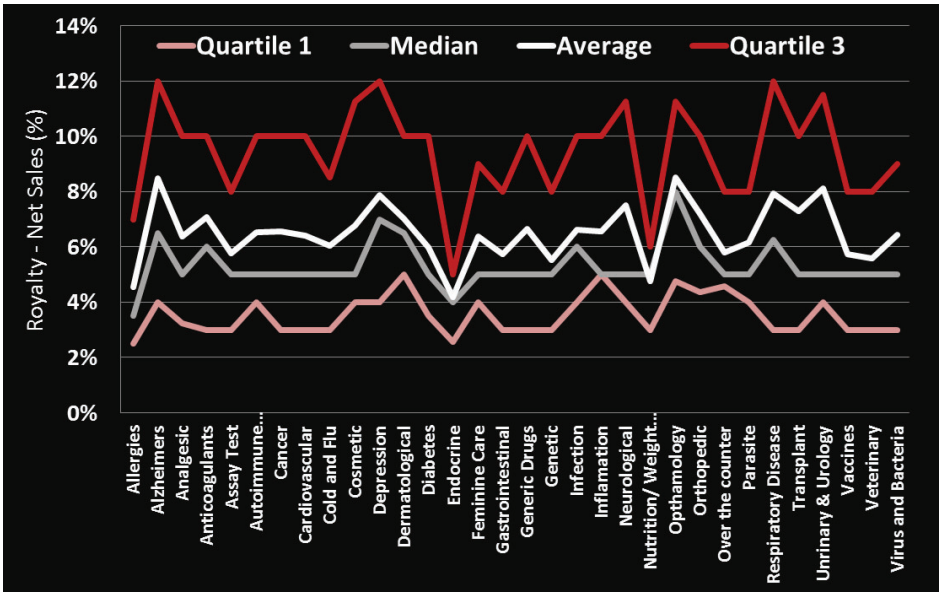
Rates differ at stages of development



Source: Les Nouvelles: Review of LES BioPharma Royalty Rate and Deal Terms Survey

Royalty rates example

Granularity – industry level analysis doesn't always yield insights



Key valuation assumptions

Cross-checks and defensibility

The rigour of an IP valuation is heavily dependent on the quality of the assumptions. A formal valuation report will include a significant amount of analysis to support each assumption, and clearly state all data sources.

- ❑ Product earnings and pricing economics
- ❑ IP quality (scope and strength of protection, FTO)
- ❑ Cost of capital (debt, equity)
- ❑ Legal, technical and commercial risks
- ❑ Useful economic life
- ❑ Commercial considerations such as competitive forces, market characteristics, time to market and rate of uptake (early stage)
- ❑ Technical considerations (usefulness, stage of development, and economic contributions)
- ❑ Benchmark against competitors and market

Often necessary to use more than one method to support key assumptions and the valuation opinion:

- Heterogeneous nature of IP
- Information gaps

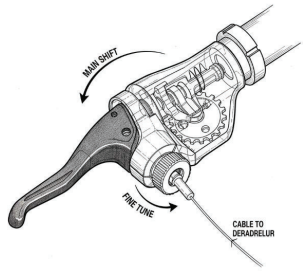
RICS Guidance Note on Valuation of IP

Tech IP example

Patent example – not all patents are created equal

Measure of patent quality involves analysing its novelty, inventive step, product alignment, geographic coverage, multi-use application and critically, the scope of the claims – as the example below illustrates.

Invention: *a single lever that shifts gears (main click) and fine-tunes the position (secondary click).*



Example of low-quality patent

*I claim: An **aluminium** gear-shifting mechanism for a **racing bicycle**...*

- Low quality claim because easy to design around.
- A competitor could use carbon fibre or sell it on a mountain bike and not infringe.

Example of better-quality patent

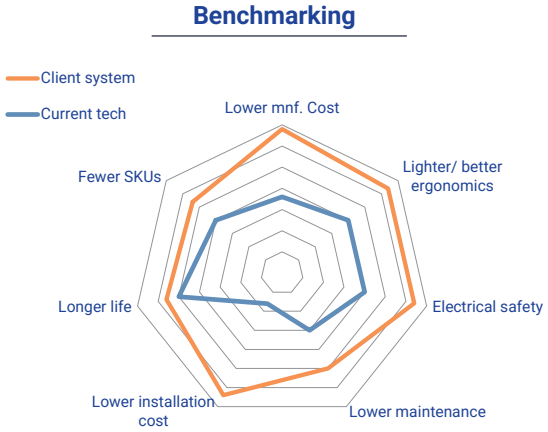
*I claim: A control apparatus for a bicycle derailleur, comprising: a lever... a mechanism configured such that a **primary actuation** causes a gear change, and a **secondary, distinct actuation** causes a micro-adjustment...*

- Broadly protects the core functional concept. Difficult to design around.
- Requires expert analysis.
- This is what creates market exclusivity and pricing power.

How IP quality changes the numbers

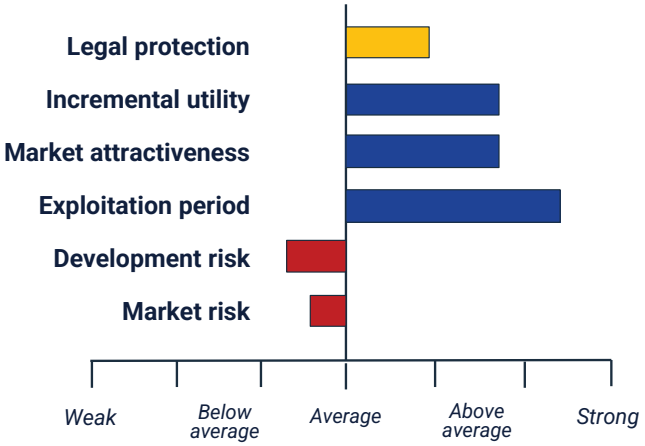
Alignment between economic benefits and IP protection

PROTECTION	TECH FEATURES	FUNCTIONAL BENEFITS
Paten A, claim 1	Pin/ socket interface	Lower capex
Patent C, claim 3	Materials & design	Better ergonomics
Patent B	Cable anchoring	Electrical safety
Trade secret	Thimble arrangement	Lower operating cost
Registered design	Plug arrangement	Longer life



Asset assessment metrics

Technology rating example



Brand IP example

Company Activity → Consumer Attitudes → Consumer Behavioural → Market Performance

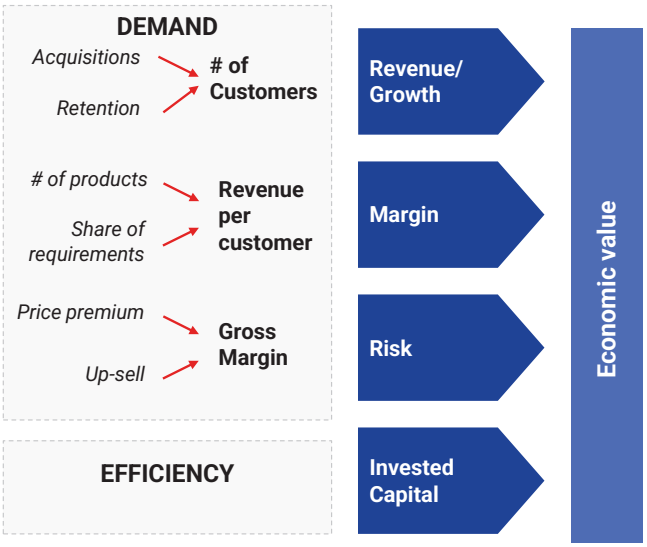
	Blind		Named
Prefer Diet Pepsi	51	→	23
Prefer Diet Coke	44	→	65
Equal / Don't know	5		12

Brand IP example

Brand equity:

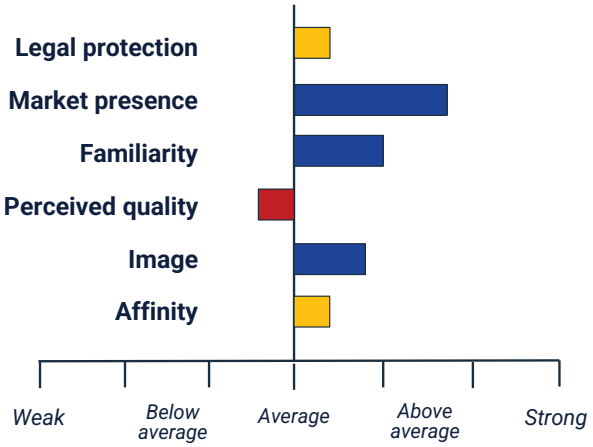
"Consumers ***react more favourably*** to a product when the brand is identified high level of brand awareness and ***familiarity*** with the brand and holds some strong, favourable, and unique brand associations in memory."

Kevin Lane Keller



Asset assessment metrics

Brand rating example

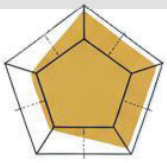


Tying it together example

Connecting IP Quality to Financial Performance

The core principle: **Quality of IP affects risks, future cash flows and financial performance.**

Asset mapping and technology grading → **WACC Reduction** → **Margin sustainability** → **Growth rate sustainability** → **Other risk adjustments** → **Premium exit multiples** → **Exit Valuation Model**

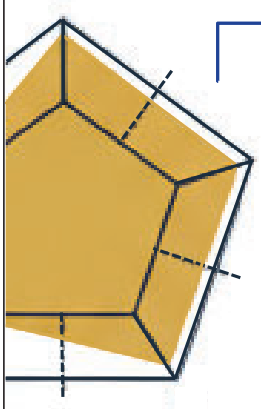


Assess IP quality across multiple factors, mapping each directly to a key valuation input.

IP Impact Example 1:

Defensible IP → Lower Risk → Lower WACC

Strong IP reduces the uncertainty of future cash flows, directly justifying a lower discount rate and a higher present value. This applies to patents, though other intangible assets can be just as impactful.



Replication Complexity Score Measures:

- Patent/IP protection
- Difficulty to replicate
- Replacement effort

A high "Replication Complexity" score and clean Freedom to Operate (FTO) analysis mean:

- Lower probability of costly litigation.
- Lower risk of a competitor eroding market share.

This reduced risk directly lowers the "Company-Specific Risk Premium" (CSRP) used in building up the Cost of Equity and WACC.

Valuation impact

Company-specific risk premium factors

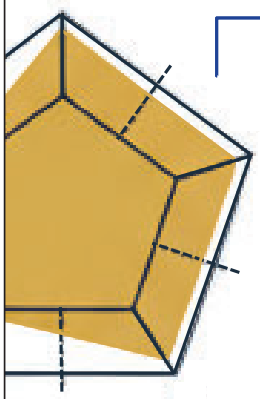
4.0%	→	2.5% ▼
Standard CSRP		IP-adjusted CSRP
15.0%	→	13.8% ▼
Base WACC		Reduced risk
$200M	→	$225M ▲
Base valuation		Adjusted valuation

A $25M (12.5%) uplift directly attributable to quantified IP strength.

IP Impact Example 2:

Blocking Patents → Pricing Power → Margin Sustainability

Patents that protect core product features are the reason a company can sustain premium margins against commoditisation pressure.



Financial Performance Score

Includes ability to sustain premium margins due to:

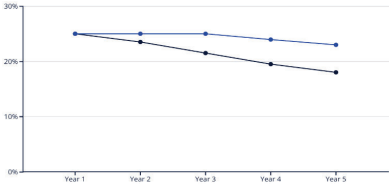
- Patent and product alignment – matching functional and commercial benefits to protected features
- Any cost efficiencies provided by the patented technology

A high "Financial Performance" link score shows a direct connection between the patented technology and the company's ability to charge a premium.

This provides a defensible rationale for forecasting stable or only slightly declining gross/EBITDA margins, rather than assuming margin erosion due to competition.

Valuation impact

5-Year EBITDA Margin Forecast Comparison



Standard Assumption

IP-Supported Assumption

$15M ▲

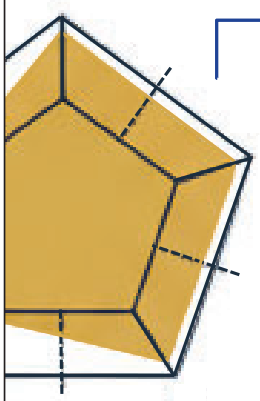
Additional valuation adjustment

Cumulative Impact: This margin protection represents approximately **$15M in additional EBITDA** over the forecast period, value that would be lost under standard erosion assumptions.

IP Impact Example 3:

Barriers to Entry → Market Share Protection → Higher Growth

A strong patent/IP portfolio acts as a barrier to entry, allowing the company to capture and retain market share, justifying more aggressive growth assumptions.



Commercial Risk Score

- Barriers to entry
- Capex requirements
- Forecast risk

When IP prevents new entrants, the company's addressable market is more secure.

This supports higher confidence in revenue growth forecasts and, critically, justifies a higher long-term Growth Rate in a DCF model, as the company's competitive advantage period is extended.

Valuation impact

Long-term Growth Rate

2.5% → 3.0% ▲

Standard — IP-defensible Rate

$23M ▲

IP Value adjustment

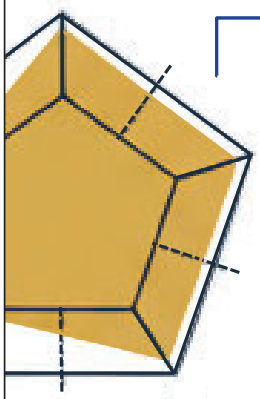
EBITDA (Final Year): $28M

WACC: 13.8%

IP Impact Example 4:

Geographic Coverage → De-Risked Expansion → Higher Confidence

Securing patent rights in key target markets transforms international expansion from a speculative hope into a defensible, de-risked strategy.



Financial Potential and Market Attractiveness Scores

- Greater market penetration
- Additional revenue from licensing opportunities
- De-risked expansion
- IP protection provides "right to win" and barrier against local competitors

Revenue forecasts for new geographic markets are often heavily discounted by buyers due to perceived high risk.

Having granted patents in those jurisdictions (e.g., EU, China, USA) provides a "right to win" and a barrier against local copycats from day one.

This makes the international revenue streams in your model far more credible and less likely to be discounted by a buyer during diligence.

Valuation impact

Patent Coverage Map and Revenue Forecast

Market	Scenario	Year 1	Year 5
USA (Existing)	Established	$65M	$95M
Europe (New)	Patents Granted	$12M	$38M
Europe (New)	No Patent Protection	$8M	$18M
Asia (New)	Patents Granted	$8M	$30M
Asia (New)	No Patent Protection	$5M	$12M

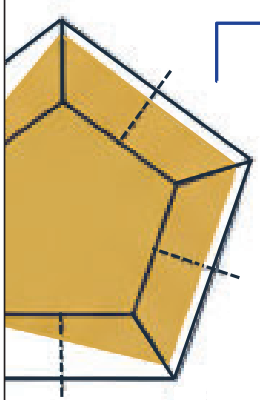
$38M ▲

Unlocking additional Year 5 forecast revenue

IP Impact Example 5:

IP Dominance → Strategic Value → Premium Exit Multiples

A strong IP position is a hallmark of a category leader, justifying a premium exit multiple compared to less-protected peers.



Top-Decile IP Grading Score Versus Benchmark

- IP quality
- Barriers to entry
- High commercial and technical impact
- Potential multiple uses and applications
- Potential licensing revenue stream

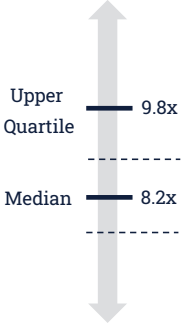
Buyers pay a premium for strategic assets that offer a durable competitive advantage.

A formal IP Grading Report serves as the evidence file to argue why your company should trade at the top of the comparable company range, not the median.

This is the most direct way IP value translates to deal value in negotiations.

Valuation impact

EV/EBITDA Multiples Scale of Exit Value



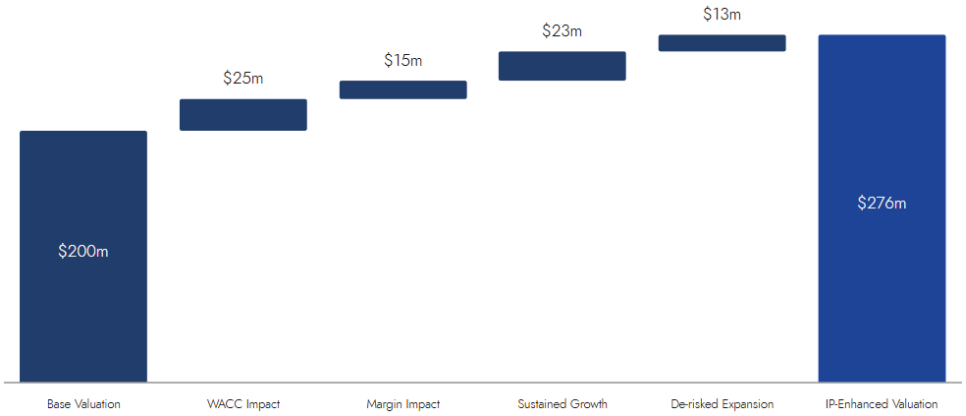
IP grading report with strong IP position supports higher exit value multiple

Tying it together

Cumulative effects of IP quality translate to a tangible, significant increase in exit value.

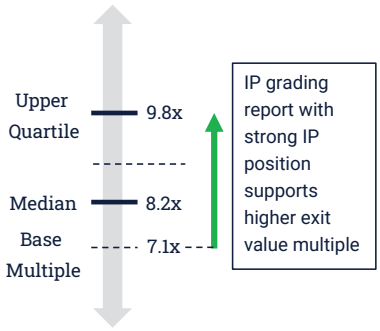
Combination of financial impact of IP quality such WACC, margin, growth and risk factors contribute to considerable improvement in exit value – justifying a higher intrinsic value of the business. Example below indicates a 38% appreciation of value and at a higher effective exit multiple.

Waterfall chart showing the impact of cumulative valuation contributions by factoring IP quality and impact



Valuation impact

EV/EBITDA Multiples Scale of Exit Value



Case Study

Successful exit at higher valuation multiple after intangible asset analysis

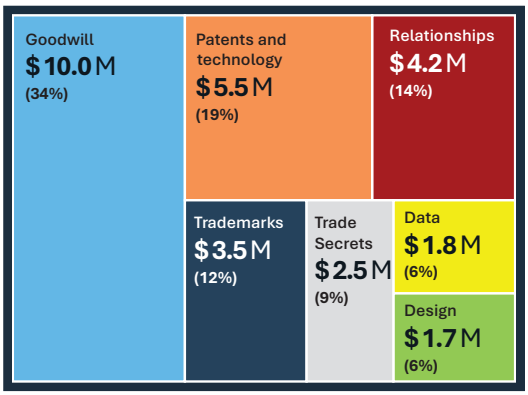
Situation

- Fintech with buyout offer.
- Revenue history, but still in growth stage
- Deal adviser's price estimate based on industry **multiple of 10x.**
- Founders' concern: undervaluation.

Outcome

- Conducted detailed IP asset mapping and drafted descriptions.
- Helped client identify functional benefits v. competitors, earnings uplift and assessed quality of protection.
- Crafted coherent narrative linking IP assets to economic drivers.
- Resulted in a detailed valuation report that supported a higher valuation. The buyer agreed to **22x EBITDA multiple**.

Example IP Asset Identification and Value Mapping



Outcome

Client sold company for 22x EBITDA

Case Study

Counter-takeover offer accepted with 50% premium over original offer

Situation

- Mature listed apparel company but considered to have underperforming brands.
- Take-over offer was marginally above market cap of $125M.
- Board expected higher intrinsic value.

Outcome

- Conducted detailed IP asset mapping and expert grading.
- Evaluated:

Demand Drivers

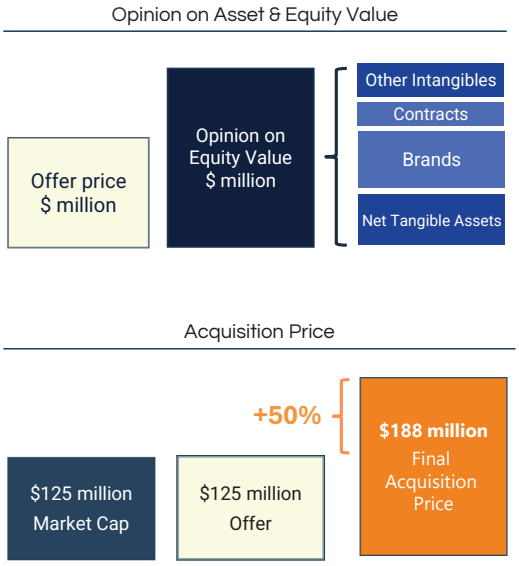
› Product differentiation
› Brand equity
› Price premium
› Availability

Efficiency Drivers

› Manufacturing efficiency
› Marketing efficiency
› Capital efficiency

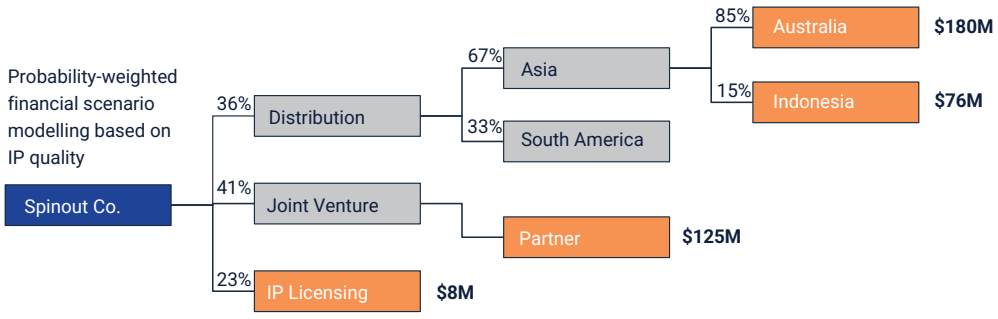
Risk

› Market risk
› Company specific risk



Early Stage IP Approaches

For technology that will not be commercialised for several years, there is uncertainty regarding the likelihood, extent and timing of future earnings. In some instances, the technology under development will have to be integrated with other resources in order to generate earnings, and at an early stage it is difficult to evaluate its relative importance within an income generating unit.



Common Valuation Pitfalls

- Financial modelling is not valuation
- Over-reliance on royalty rate benchmarks
- Not properly adjusting comparable market transactions for unique IP assets
- Checklist approach
- Not accounting for inter-relationships between intangibles
- Not following international standards and best practices – IVSC, RICS guidelines
- Not able to defend the derived value

Questions to ask during valuation

A practical checklist for briefing valuation work, and for pressure-testing it before it is relied on.

1. Scope and purpose

- What exactly is being valued?
- What is the intended use of the valuation?
- Who is the audience or decision-maker?
- What basis / premise of value is required?
- Which jurisdictions, rights and time period matter?

2. Method and assumptions

- Why was this method chosen?
- What assumptions drive the result?
- How is IP quality reflected in the model?
- How were royalty rates / comparables adjusted?
- What useful life, risk and growth assumptions matter most?

3. Evidence and defensibility

- What evidence supports each key assumption?
- What cross-checks were used?
- What are the data gaps or limitations?
- Does the result move materially under sensitivity testing?
- Would this analysis stand up in negotiation, audit or court?

A good valuation should be understandable, challengeable and supportable: not a black box that only the valuer can defend.