# Intellectual property in the automotive industry

Transfer pricing aspects



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Introduction	1
What types of intellectual property are there?	2
Why is this such an important issue in the automotive industry?	4
Implications for measuring intellectual property in the automotive industry	5
A typical analysis	5
An alternative view	6
Summary	9

# Introduction

Transfer pricing taxation rules place a huge burden on multinational taxpayers. These rules exist to ensure that companies adhere to the "arm's-length principle" (where economic conditions between two unconnected enterprises reflect those that would exist between independent enterprises¹) when pricing transactions between their affiliates. These rules apply to intangible and tangible product flows, and it becomes a difficult yet important analysis when different parts of a global organisation contribute or exploit intellectual property (IP). It has been calculated that such knowledge assets now comprise a greater share of public companies' market values than their hard assets,² so such intangibles are vital to shareholders, too. Most importantly, from a transfer pricing perspective, the way intellectual property is created, used and shared drives the way profits are recognised for tax purposes. This is an increasingly significant focus for tax authorities, which perceive substantial profits made at a (consolidated) group level are not necessarily replicated at a local level.

This area involves a great deal of judgment, and much reliance is placed on the principles presented in the Organisation of Economic Co-operation Development (OECD) guidelines.<sup>3</sup> The intention of the guidelines is to promote the arm's-length principle, but the guidelines acknowledge that this principle can be difficult to apply to intangible property because such property may have a special character. Also, for wholly legitimate business reasons, associated enterprises might sometimes structure a transfer in a manner that independent enterprises would not contemplate.<sup>4</sup>

This paper highlights the OECD guidelines in the context of an automotive group, since there are some features of the auto industry that can make the analysis different than other sectors and, consequently, may create more conflicts between taxpayers and their revenue authorities. Characteristics intrinsic to a high-value consumer product business such as the automotive industry include:

- A massive, upfront financial investment to develop products, although those products may only have four- to five-year lifespans
- Relentless advances in technology to produce vehicles and systems that meet the ever-evolving desires and specifications of consumers and regulators
- Constant innovation in process, branding, delivery and programme management in order for manufacturers to compete

These characteristics must be weighed before an automotive multinational group determines how it will be structured, and the results of these decisions will require transfer pricing attention from both the group's tax department and tax authorities. Decisions include whether to centralise research and development and intellectual property ownership; where to locate manufacturing and how to manage capacity; and determining the extent of cooperation with suppliers and even with other manufacturers. These decisions will, in turn, establish where certain fundamental risks exist in the organisation (particularly, these days, where capacity risk lies and where future latent employment costs will be incurred) and, ultimately, how overall profits (or losses) for a group might be allocated. All these decisions interconnect and make the application of the arm's-length principle very difficult.

The following sections explore the different types of IP, why IP is so important in the automotive industry and what the implications are for valuing IP. A second paper, scheduled to be released later in the year, will consider where value exists in an organisation, and it will describe some of the business and transfer pricing models used in the industry.

<sup>&</sup>lt;sup>1</sup>Article 9 of the OECD Model Tax Convention

<sup>&</sup>lt;sup>2</sup>Technical Insights vol 4 (Exploiting intellectual property in a complex world), PwC, 2007

<sup>&</sup>lt;sup>3</sup>Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations, OECD, 1995 et seq (OECD guidelines)

<sup>&</sup>lt;sup>4</sup>OECD guidelines, para 6.13, March 1996

# What types of intellectual property are there?

As mentioned above, IP is often a significant asset to an organisation, and it can either be registered legally or go unregistered. Chapter VI of the OECD guidelines describes intangible property (which we here use interchangeably with intellectual property) as including: "rights to use industrial assets such as patents, trademarks, trade names, designs or models. It also includes literary and artistic property rights and intellectual property such as know-how and trade secrets." 5

In an automotive context, you might consider three key areas in which companies build intangible value:

- Core and applied product technology and designs
- The know-how to develop processes (for efficient manufacturing, assembly or logistics) and also to manage all the individual strands, such as innovation culture, strategy for partnerships and product portfolio management
- Marketing intangibles (trademarks, brand)

Given the factors identified in the introduction, the imperative for an automotive manufacturer (OEM) becomes managing all these areas successfully. Because these areas overlap considerably, manufacturers must develop a strategy that deals with them holistically.

# Contrast these three examples:

- Environmental focus: In recent years, an OEM's overall brand reputation could have been enhanced considerably by technological efforts to develop and sell a more environmental but high-value car.
- Low-priced cars: In the battle for new customers in this segment, the marketing intangible is likely to be more valuable for an innovative small car than the core technology deployed to create it.
- Platform sharing: Various OEMs leverage the platform-sharing approach by utilising the same technology is used in diversely branded models in different market segments.

<sup>&</sup>lt;sup>5</sup>Paragraph 6.2 of OECD guidelines

There are vastly different strategies for coping with these intricacies, but the examples listed in the box clearly demonstrate the critical nature of a group's core technology. Although technology alone may not translate into a higher-value product, an absolute minimum technology level is required to stay competitive.

While this core technology tends to be keenly guarded internally, what might often differentiate a product is how a manufacturer engineers and applies the technology or how imaginatively that technology can be marketed. And what might make the difference between a profit and loss at a consolidated level is the strategic direction set by leadership (for instance, regarding portfolio management) and the group's process know-how (e.g., how to make things as cheaply as possible). In other words, what might at face value look like the type of activity that would add the most value in a fast-moving, technological industry may not be as important as less "visible" intangible properties.

# Why is this an important issue in the auto industry?

As you might expect with a highly technical consumer product, the automotive sector represents a significant contributor to global research and development (R&D) and marketing expenditures.

## Research and development

Of the top 25 global companies by R&D expenditures in 2006, seven are automotive OEMs (four in the top 10) and one is an automotive supplier. Almost 17 percent of global R&D expenditures are spent in the auto industry, which is not much lower than the top two sectors (pharmaceuticals and technology).<sup>6</sup> The top 16 of the world's automotive OEMs spent, on average, 3.87 percent of their turnover on R&D in 2006, and the top 22 suppliers spent, on average, 3.80 percent.<sup>7</sup>

# Marketing

While it is more difficult to quantify the actual expenditure on marketing, there is some evidence in the public domain about how that expenditure translates into brand value. For instance, in one recent survey of the top 20 global brands, four automotive OEMs grew their brand values by approximately 10 percent during 2006. An additional six automotive OEMs were in the top 100 in terms of brand value, and many of those organizations also grew their brands.

However, despite the amount spent on R&D and marketing in the industry, not all expenditures will be beneficial. Some expenditures may lead to a surprise success, such as the marketing impact of hybrid technology by first movers in the market. Some investment may simply be necessary to catch up or compete with others in the market (e.g., OEMs following with their own hybrid technology). And, of course, some R&D will not produce anything or will yield a model that is unpopular. The Detroit 3 automakers are among the top 10 global companies in terms of R&D investment, and yet all are suffering from well-publicised financial problems. A similar situation holds true for many suppliers.

Because of the vast amount of R&D investment, often made with little guarantee for financial success, required to compete in the sector, collaborations and partnerships within and between OEM groups and between OEMs and suppliers have become commonplace. There are many examples of this (e.g., the Jaguar X-type being built on the Mondeo platform<sup>10</sup>; Toyota and Peugeot Citroen selling three different branded but very similar small cars off the same production line),<sup>11</sup> and there are many different tie-ups between suppliers and OEMs. Such cooperation may make perfect business sense, but it requires significant technology sharing, something that necessitates significant thought from a legal perspective, especially when an OEM opts to work with two suppliers to manage the risk for its component delivery and one supplier has to share its designs with the other.

<sup>&</sup>lt;sup>6</sup> Source: The 2007 R&D Scoreboard, Department for Business Enterprise and Regulatory Reform

<sup>&</sup>lt;sup>7</sup> Source: PwC Global Automotive Financial Review, October 2007

<sup>&</sup>lt;sup>9</sup> Source: The 2007 R&D Scoreboard, Department for Business Enterprise and Regulatory Reform

<sup>&</sup>lt;sup>10</sup> Automotive News, 18 September 2006

<sup>&</sup>lt;sup>11</sup> See www.tpca.cz/en

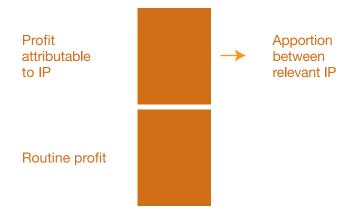
# Implications for measuring intellectual property in the automotive industry

# A typical analysis

Having identified a transaction between related or controlled parties, the next step in any transfer pricing analysis should be to explore the chance that a comparable uncontrolled price (CUP) exists (i.e., the same or similar transaction with a third party). If there is a CUP, this should be used either in defence of the position or to highlight any significant differences. The OECD guidelines state that, in cases involving highly valuable intangible property, it may be difficult to find such a CUP. Also, in our experience, license agreements held on public databases will rarely be comparable in terms of both product and level of market, so one is often required to search elsewhere for evidence.

It also may be difficult to apply other traditional or transactional methods to resolving transfer pricing problems, when the analysis hinges on comparing the profits (either gross or net) of the least complex<sup>12</sup> party with that of a sample of third parties performing similar functions. This is particularly likely when both parties to the transaction own valuable intangible property or unique assets used in the transaction that distinguish the transaction from those of potential competitors. In such cases, the profit-split method may be the best approach for testing the results of the two related parties.<sup>13</sup> It is worth noting that, as tax authorities become more sophisticated, they will employ this method with increasing regularity.

Put simply, in applying the profit-split method, the guidelines suggest you work out the routine profit that the license fee payer would earn as an independent (licensed) manufacturer and any extra profit that arises due to nonroutine factors such as intellectual property. When the components of intellectual property (brand, technology, etc.) have been established, the nonroutine profits can be apportioned between the entities in some equitable way:



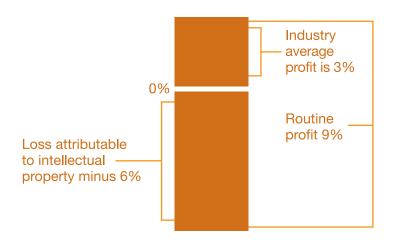
<sup>&</sup>lt;sup>12</sup> OECD guidelines, Paragraph 3.43

<sup>&</sup>lt;sup>13</sup> OECD guidelines, Paragraph 6.26

It is well known that there are a number of self-designated contract manufacturers (e.g., Bertone, Heuliez, ILCA Maggiora, Karmann, Magna-Steyr, Matra, Pininfarina, Valmet, Avtotor, Doninvest and Severstal) in Europe. However, it is difficult to isolate the results of those activities from their relevant public filings. An alternative approach is to examine a broader range of independent manufacturers in the industry and filter out those that take on more than a minimum level of risk and those that do not own more than a minimum level of IP. This allows us to replicate the results of contract manufacturers, and a recent study shows that the median mark-up on costs for such manufacturers is about 5 percent. One could argue that, together with a distribution return of approximately 4 percent, the combined figure represents the routine profit in the system. If you compare this to the total profit in the industry, the difference will be the value of IP.

There is a wide range in the profit margins/earnings per share reported by OEMs, and this is unlikely to be accounted for by product-related IP. However, it would be fair to say that other types of IP will play a part (e.g., the know-how to manage the supply chain and launching the right car at the right time, and the willingness of customers to pay more for premium brands).

A recent PwC survey showed that the top 17 OEMs made an average return on sales of just more than 3 percent in 2006-07. Using this figure as a base and with the routine profits mentioned above, the diagram below shows that we could instead be talking about a split of loss (minus 6 percent), not profit, suggesting that group's intellectual property has no (or negative) value.

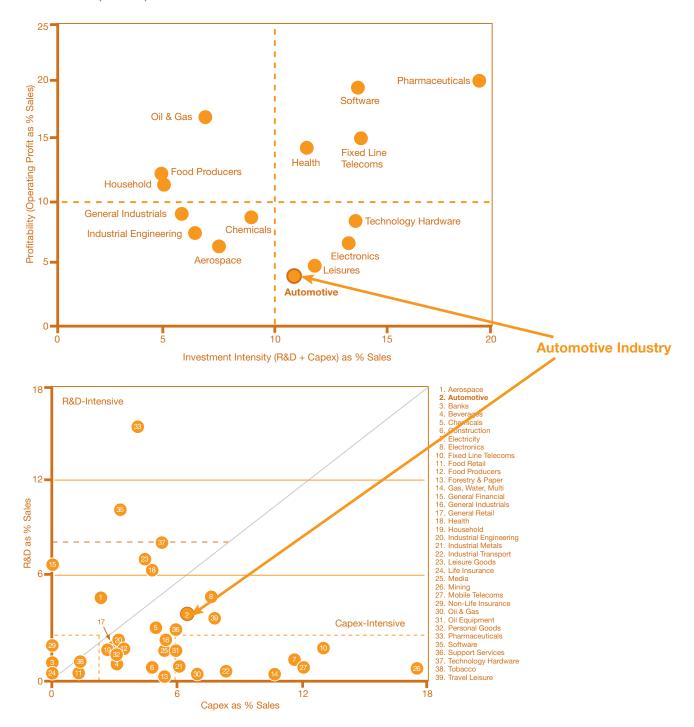


This profit-split method has grown in popularity among tax authorities in recent years, and it also has risen in prominence and status in the eyes of the OECD.<sup>14</sup> This situation may have dissuaded OEMs and suppliers from implementing tax-advantaged business models, since the implication is that, even if there is potential to move some intellectual property, it might only shift losses and not profits.

<sup>&</sup>lt;sup>14</sup>OECD Discussion Draft on Transactional Profit Methods, 25 January 2008

# An alternative view

The two charts<sup>15</sup> below show investment intensity against profits for a number of industries and R&D expenditures relative to capital expenditures.



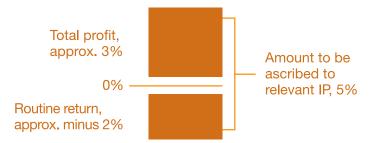
<sup>15</sup>Source: The 2007 R&D Scoreboard, Department for Business Enterprise and Regulatory Reform

Not surprisingly, both charts convey the importance of R&D to the automotive industry, but something else complicates things, something that explains why profitability is relatively low while capital expenditures are relatively high: excess capacity. This underlines one of the weaknesses of the profit-split method: By attempting to oversimplify what would happen at arm's length when two owners of intangible value collaborate, it disregards the reality and complexity of the issues.

Most tax authorities would argue that a local subsidiary manufacturer should make at least a routine profit because it is a captive, yet indispensable, part of the group. However, in an uncertain environment where plants are being closed and production moved abroad to exploit advantageous exchange rates (e.g., European OEMs opening plants in the US) or lower costs (moving to India and China), or companies are expanding to meet local demand in growing markets (Russia), is the profit-split method realistic?

Even classic contract manufacturers in the automotive industry are finding their traditional sales proposition weakened by commercial factors as OEMs bring their niche production back in-house, and they are arguably less routine in their operations compared to most group manufacturing operations.

If routine profit actually is a loss because of factors such as excess capacity, that would mean that the return ascribed to intellectual property is more significant:



This outcome coincides with more traditional transfer pricing approaches such as the use of CUPs. If the industry resumes its outsourcing of niche model production to contract manufacturers while ceasing production in high-cost countries and centralising manufacturing in low-cost plants, then these structural inefficiencies will be resolved and this value will be realised in reported profits. In the meantime, this suggests that intellectual property planning can still be possible.

# Summary

The automotive industry offers specific challenges for transfer pricing when intellectual property is involved, and the usual transfer pricing methodologies may not be the best way to approach these challenges. It is an industry where considerable money is spent on both R&D and marketing, but in many cases this is an essential investment just to stay in business.

A traditional analysis that allocates routine profits to routine functions may undervalue the contribution given by central functions or assets, especially where value is provided by the less visible elements of an intellectual property package, such as know-how, portfolio management, strategic direction, etc. Taxpayers are likely to face tax authority challenges at both local country and group levels if the sum of assessed profits exceeds the total group profit. To prevent or prepare for a possible challenge, it might be worth reviewing alternative positions, such as the one suggested above, to ensure that the taxpayer does not end up paying too much tax on these profits.

In the second article of this short series, we will delve deeper into how organisations structure their intellectual property generation and usage, and review some of the potential transfer pricing models that could be applied.

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