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The IP Exodus: Profit Shifting through Intellectual Property Holding Structures and the Challenges of Effective Regulation

Theodoros Gouveris, Maria Zisiopoulou

Gymnasium Theresianum Mainz, Mainz, Germany
Email: thegou06mz11@gmail.com

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Abstract

Intangible assets—intellectual property foremost among them—have, in the wake of digitalization, emerged as the dominant source of value in modern enterprises. Their virtually unlimited geographic mobility renders them the preferred instrument of international tax planning. Through the deliberate transfer of IP rights to low-tax jurisdictions by means of IP holding structures, multinational enterprises divert substantial profits from taxation in high-tax jurisdictions. This undermines the fiscal capacity of the affected states and threatens the social legitimacy of a tax system that places domestic enterprises and private individuals at a structural disadvantage. The present article analyses the architecture of classical IP holding structures, the countermeasures established at the international and European Union level, and the entrepreneur structure as a sophisticated adaptive strategy designed to circumvent existing anti-avoidance norms. The analysis reveals that reactive regulation invariably lags behind structural innovation. The aim is to demonstrate that sustainable containment requires the entrenchment of the principle of taxation at the place of actual value creation as a binding foundational norm of international tax law, alongside sufficient multilateral coordination to overcome the divergence of national interests.

Keywords

Intellectual Property Holding Structures, Cross-Border Profit Shifting, BEPS and Anti-Avoidance Regulation, Entrepreneur Structure, Nexus Problem

1. Introduction

Intellectual Property (IP) denotes a category of legally recognized rights over intellectual creations, conferring upon the rights—holder a time-limited and subject-matter—specific exclusive right while prohibiting third parties from exploiting the protected subject matter without express authorization. The classical categories of IP comprise patents, trade marks, copyright, software rights, and licences. IP acquires particular significance in the context of commercial exploitation: it may be deployed for proprietary use, generating a sustained competitive advantage through exclusivity, or alternatively exploited through licensing to third parties. Such licensing may take the form of an exclusive licence, a non-exclusive licence, or a sole licence—the latter obliging the licensor to refrain from granting further licences to third parties while reserving its own right of use. Beyond licensing, IP may also be commercially realized through the outright assignment of rights, whereby the holder permanently divests itself of its legal position.

The economic value of IP has increased substantially in the wake of digitalization. Competitive advantage today derives less from physical capital than from knowledge, technology, and brand equity. Market-leading enterprises across the globe now generate their market capitalization almost exclusively through IP holdings. This is most strikingly illustrated by the composition of S&P 500 market capitalization as depicted in Figure 1: whereas tangible assets accounted for 83% of the market value of S&P 500 constituents in 1975 and intangible assets for a mere 17%, this ratio had, by the end of 2025, undergone a near-complete inversion. Intangible assets now represent approximately 92% of aggregate market capitalization, while tangible assets account for no more than 8%.

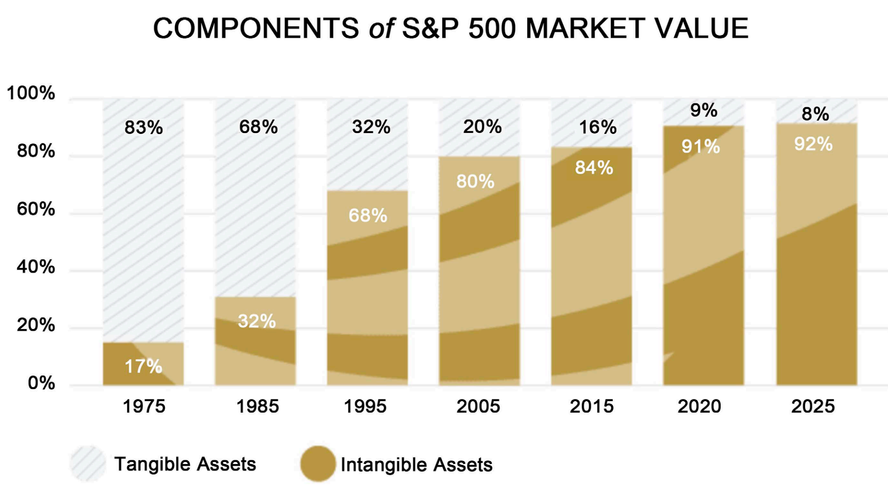

Figure 1. Components of S&P 500 market value. Source: Ocean Tomo, A Part of J.S. Held, Intangible Asset Market Value Study, 2025.

The particular significance of IP from a tax law perspective derives from its intangible nature. Since IP lacks physical substance, it is in principle geographically unbound. Proprietary rights, licence agreements, and income streams may be allocated to any jurisdiction of choice through contractual arrangements, without the physical movement of a single asset. This renders IP uniquely attractive to multinational enterprises seeking to transfer their IP rights to low-tax jurisdictions in order to recognize royalty income there and minimize domestic tax liability. Such structures result in profits generated through the use of domestic infrastructure being subject to taxation exclusively abroad, thereby weakening the fiscal incentive for states to maintain costly and resource-intensive public infrastructure, the financing of which can no longer be reliably secured through tax revenues. Over the long term, this dynamic risks materially impairing a state's capacity for investment and its overall level of welfare.

This article proceeds by way of doctrinal and comparative analysis, drawing primarily on the legal framework of the European Union and the OECD's international tax instruments, with particular reference to the jurisdictions of Germany, Ireland, and the Cayman Islands as paradigmatic representatives of high-tax, low-tax, and zero-tax regimes, respectively. The cases of Apple Inc. and Google LLC serve as illustrative specimens of broader structural patterns, demonstrating how IP holding arrangements have been deployed at scale and how regulatory responses have developed in their wake. Against this backdrop, the article examines, on the one hand, the architecture of the classical IP holding structure as an instrument of tax minimization and, on the other, the legislative countermeasures introduced at both the international and European Union level. It further analyses the so-called entrepreneur structure, through which it is shown how tax planning arrangements within IP holding frameworks actively anticipate and seek to circumvent existing anti-avoidance norms. Whereas the classical IP holding company functions as a passive licensor—bearing economic risk in respect of the IP itself while leaving operational decision-making and market exposure to the domestic operating entities—the entrepreneur structure reconceives the holding company as the active center of the entire value chain. By assuming not merely IP-related risk but the full spectrum of entrepreneurial risk, including strategic, market, and product risk, the holding entity assumes the outward role of principal, engaging both internal group entities and external service providers at every stage of the commercial process to discharge operational functions on its behalf and at its direction. This structural inversion simultaneously neutralizes the principal anti-avoidance mechanisms directed at substance-deficient holding companies and repositions the locus of taxable profit within a low-tax jurisdiction, without sacrificing the genuine economic substance that modern regulatory frameworks demand.

The dual purpose of this contribution is to raise public awareness of the societal consequences of cross-border profit shifting and to identify legislative shortcomings in existing regulatory frameworks, thereby drawing the attention of policymakers to the need for further and more structurally ambitious reform.

2. IP Holding Structures as an Instrument of International Tax Planning

The IP holding structure exploits the commercial exploitability of IP through licensing. Since the economic use of IP is neither geographically bound nor dependent upon the domicile of its beneficial or legal owner, an enterprise may deploy both proprietary and third-party IP (WIPO, 2024). Where third-party IP is utilized, the enterprise is obliged to remit to the rights-holder a corresponding consideration—the so-called royalty payment (Bently et al., 2022)—and receives in return, as licensee, a contractual right of use. The royalty payment so rendered may be deducted as a business expense for tax purposes, thereby reducing the taxable base (Bundesministerium der Finanzen, 2024). Where an enterprise makes use of its own IP, by contrast, no such expenditure arises, resulting in a correspondingly higher taxable profit.

Tax planners exploit the divergent tax consequences of deploying proprietary versus third-party IP through the use of so-called IP holding companies. These are subsidiary entities incorporated specifically in jurisdictions with particularly favorable tax regimes, with a view to concentrating the group's IP assets therein (OECD, 2023). Such jurisdictions are commonly referred to as low-tax jurisdictions (Tax Foundation, 2026). Classical IP holding locations include Ireland, with a corporate income tax rate of 12.5%, and Hungary, at a mere 9%—both substantially below the European average of 21.6% (Tax Foundation, 2026). Many such jurisdictions additionally offer so-called patent box regimes, i.e., preferential tax arrangements applicable to IP-derived income, with reduced rates ranging from 1.75% in Malta to 12.5% in Türkiye (Tax Foundation, 2024a). Beyond these low-tax jurisdictions, there exist outright tax havens—most notably the Cayman Islands and Bermuda—which levy no corporate income tax, capital gains tax, or withholding tax on royalty payments whatsoever (Cayman Islands Government, 2024; Deloitte, 2024).

The IP is transferred to the foreign IP holding company, which subsequently licenses it for use and exploitation both within and outside the corporate group. The domestic operating entity records the royalty payments made to the holding company as a deductible operating expense, thereby materially reducing its taxable income. The IP holding, by contrast, derives substantial profits from the transferred intangible assets in the foreign jurisdiction, yet is subject to little or no tax liability thereon. The targeted tax benefit thus follows directly from the differential between the statutory tax rates of the two jurisdictions involved. The architecture of this arrangement is illustrated schematically in **Figure 2**.

The mechanics of an IP holding structure may be illustrated by the numerical example set out in **Figure 3**: A German technology company, subject in Germany to a cumulative effective tax rate of approximately 30%—comprising corporate income tax, the solidarity surcharge, and trade tax (Bundesministerium der Finanzen, 2026)—transfers its core software patent to a wholly-owned IP holding company incorporated in Ireland, where the corporate income tax rate stands at 12.5% and neither a solidarity surcharge nor a trade tax applies (Tax Foundation, 2026). The German parent generates operating profit of €10 million and remits €4 million thereof as royalty payments to the Irish holding. The domestic taxable income is thereby reduced to €6 million, giving rise to a tax liability of €1.8 million. The Irish holding receives the €4 million in royalties and subjects them to tax at 12.5%, resulting in a tax burden of €500,000. The group's aggregate tax liability thus amounts to €2.3 million. Absent the IP holding structure, the full €10 million would have been subject to taxation in Germany, resulting in a tax charge of €3 million at the 30% rate. The tax saving attributable to the transfer accordingly amounts to €700,000.

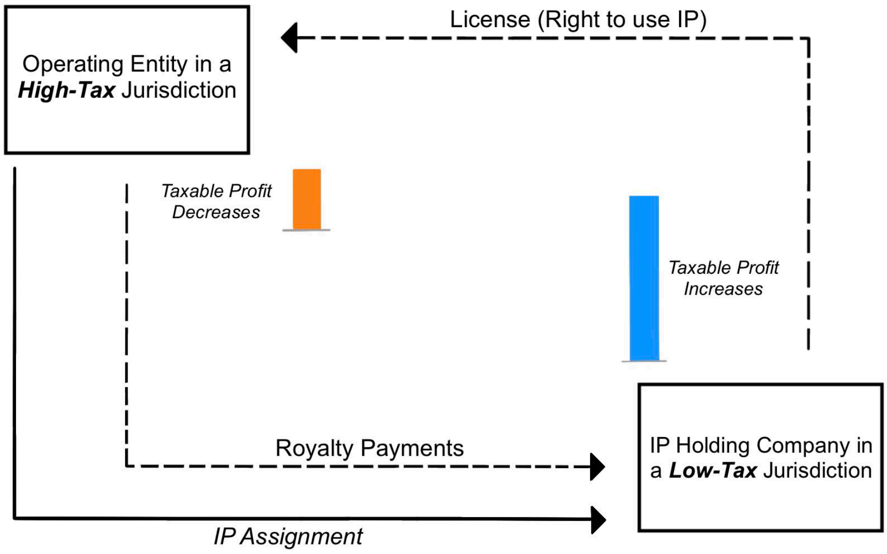

Figure 2. Architecture of the classical IP holding structure. Source: Author's construction.

The tax effect is yet more pronounced where the IP is transferred not to Ireland but to a tax haven such as the Cayman Islands. In that scenario, no tax whatsoever falls due on the holding's royalty income of €4 million (Cayman Islands Government, 2024), reducing the group's aggregate tax burden to a mere €1.8 million. Relative to the purely domestic structure, this yields a tax saving of €1.2 million, and relative to the Irish variant, an additional saving of €500,000—compellingly illustrating the fiscal leverage afforded by a zero-tax jurisdiction.

The practical significance of IP holding structures is powerfully demonstrated by real-world cases drawn from corporate practice. Apple Inc., one of the world's most valuable companies and a consistent constituent of the five largest market capitalizations in the S&P 500, furnishes a particularly instructive example. In 1980, Apple incorporated two Irish subsidiaries—Apple Sales International (ASI) and Apple Operations Europe (AOE)—and assigned to them the IP rights covering all markets outside North and South America (U.S. Senate Permanent Subcommittee on Investigations, 2013). Although both entities were incorporated in Ireland, neither was treated as tax-resident in any jurisdiction under applicable tax law (Academy of Tax Law, 2024)—rendering them, in the terminology of the scholarly literature, stateless corporations (Kleinbard, 2011). On that basis, the Irish Revenue Commissioners concluded advance pricing arrangements with

	German Technology Company without IP-Holding Structure	German Technology Company with IP-Holding Structure in Ireland (Low-Tax Jurisdiction)	German Technology Company with IP-Holding Structure in the Cayman Islands (Tax Haven)
Operating Profit	10.000.000€	10.000.000€	10.000.000€
Cumulative Tax Rate in the Home Jurisdiction	~ 30% (Corporate Income Tax Rate: 12,5%; Solidarity Surchage: 0,825%; Trade Tax Rate: 14,5%) Figures for Germany as of April 2026	~ 30% (Corporate Income Tax Rate: 12,5%; Solidarity Surchage: 0,825%; Trade Tax Rate: 14,5%) Figures for Germany as of April 2026	~ 30% (Corporate Income Tax Rate: 12,5%; Solidarity Surchage: 0,825%; Trade Tax Rate: 14,5%) Figures for Germany as of April 2026
Royalty Payments to the IP-Holding Company / Revenue of the IP-Holding Company	*not applicable*	4.000.000€	4.000.000€
Cumulative Tax Rate in the IP-Holding Jurisdiction	*not applicable*	12,5% (Corporate Income Tax Rate: 12,5%; Solidarity Surchage: *not levied*; Trade Tax Rate: *not levied*) Figures for Ireland as of April 2026	0% (Corporate Income Tax Rate: *not levied*; Solidarity Surchage: *not levied*; Trade Tax Rate: *not levied*) Figures for the Caymen Islands as of April 2026
Tax Burden in the Home Jurisdiction	3.000.000€	1.800.000€	1.800.000€
Tax Burden in the IP-Holding Jurisdiction	*not applicable*	500.000€	0€
Total Tax Burden	3.000.000€	2.300.000€	1.800.000€
Tax Saving	0€	700.000€	1.200.000€

Figure 3. Tax saving potential of the IP holding structure. Source: Author's construction.

Apple in 1991 and 2007—so-called tax rulings—under which taxable profits were determined as a percentage of the Irish branches' operating costs only (Court of Justice of the European Union, 2024a). This arrangement enabled Apple to leave the overwhelming majority of its IP-derived income untaxed. The effective corporate tax rate of Apple's Irish subsidiaries stood at 0.05% in 2011 and declined further to a mere 0.005% by 2014 (AKEUROPA, 2024).

Google similarly established, in 2006, a Bermuda-resident, Irish-registered holding entity known as Google Ireland Holdings (Irish Times, 2010)—a structure that would subsequently become widely known as the Double Irish with a Dutch Sandwich (OECD, 2015a). The arrangement provided that a first Irish subsidiary (IRL1), though incorporated in Ireland, was managed and controlled from Bermuda and accordingly treated as tax-resident there (Federal Reserve Bank of St. Louis, 2023), thereby escaping both Irish and United States corporate taxation. A second Irish entity (IRL2), by contrast, was fully resident in Ireland and collected the royalty income generated by the operating business (Irish Times, 2010). An interposed Dutch intermediary company then transferred those earnings to IRL1 free of withholding tax, by virtue of the EU Interest and Royalties Directive, which exempts royalty payments between associated companies in EU Member States from withholding tax (Council of the European Union, 2003). The Bermuda-resident Irish entity owed no tax in its turn, given Bermuda's absence of a corporate income tax (Deloitte, 2024). The profits were thus rendered, in substance, stateless in this case as well (Kleinbard, 2011). In 2017 alone, Google shifted USD 23 billion in taxable income through this mechanism, enabling its parent company, Alphabet, to achieve an effective tax rate of a mere 6% on its non-U.S. profits (Fortune, 2016).

Before proceeding to assess the countermeasures directed against IP holding structures, it is analytically necessary to situate such arrangements within a tripartite taxonomy that the subsequent regulatory discussion presupposes. At one end of the spectrum lies lawful tax planning: the deliberate structuring of commercial activity in full conformity with both the letter and the purpose of applicable tax law, the tax efficiency of which is an incidental consequence of legislative design rather than its subversion (IRC v Duke of Westminster, 1936). At the opposite extreme lies unlawful tax abuse: the active falsification of facts, the simulation of transactions devoid of economic reality, or the fraudulent circumvention of mandatory legal provisions, conduct attracting not merely tax adjustment but penal sanction (Council of the European Union, 2017). Between these poles resides the contested terrain of aggressive tax avoidance: arrangements that are formally compliant with the law yet systematically exploit the divergence between its literal text and its underlying legislative intent, thereby achieving tax outcomes that the legislator neither intended nor foresaw (Devereux & Vella, 2014). It is precisely within this intermediate category that IP holding structures are predominantly situated, and it is against this category that the General Anti-Abuse Rule, the Controlled Foreign Company rules, and the state aid control exercised by the European Commission are, each in their own modality, principally directed. This tripartite distinction is not merely taxonomic. It carries direct legal consequences for the instruments available to tax authorities and for the standard of scrutiny applicable to any given arrangement (Freedman, 2004).

Such structures are not, as a matter of law, readily classifiable as abusive. The freedom to organize one's corporate structure in accordance with economic objectives constitutes a recognized expression of the principle of private autonomy and is legally protected as such (Consolidated Version of the Treaty on the Functioning of the European Union, 2012a: Art. 49). Nonetheless, such conduct attracts criticism on the grounds that, while multinational enterprises act in formal compliance with the law in deliberately transferring IP to low-tax jurisdictions, they make intensive use of the fiscal infrastructure of high-tax states—encompassing the legal system, public education, state-funded research, and the enforcement of intellectual property rights—without contributing proportionately to its financing. Since the actual value creation—the development, marketing, and distribution of IP-protected products—regularly takes place in precisely those high-tax jurisdictions, profit shifting is criticized as a structural decoupling of economic activity from tax liability. This captures what the academic literature identifies as the nexus problem: the fundamental misalignment between the jurisdiction of value creation and the jurisdiction of taxation (OECD, 2015b; Schön, 2016). The fiscal consequences of this misalignment are not merely theoretical: empirical research estimates that profit shifting by multinational enterprises results in global corporate tax revenue losses amounting to between 10% and 30% of corporate tax revenues annually, with the burden falling disproportionately on higher-tax jurisdictions (Beer et al., 2020). A further objection rests on competitive distortion: purely domestic small and medium-sized enterprises, which are structurally precluded from accessing comparable planning arrangements, bear a proportionately heavier tax burden and are thereby placed at a systematic disadvantage relative to internationally operating groups (European Commission, 2024).

3. Regulatory Countermeasures against IP-Based Profit Shifting

In response to the proliferation of tax-motivated IP holding structures, legislators across multiple regulatory tiers have developed and enacted countermeasures aimed at curbing the systematic shifting of profits to foreign jurisdictions.

The necessity of a coordinated approach operating across several regulatory levels follows directly from the virtually unlimited geographic mobility of intangible assets. Since IP rights may be transferred to any jurisdiction worldwide without the physical movement of a single asset, purely unilateral domestic measures are inherently ill-suited to contain the structures identified above. The following sections accordingly analyse the countermeasures developed at the international level and at the level of the European Union.

3.1. Countermeasures at the International Level

At the international level, the BEPS Project (Base Erosion and Profit Shifting) constitutes a landmark regulatory framework (OECD, 2013). Initiated in 2013 by the OECD and the G20 in response to the systematic profit shifting engaged in by multinational enterprises, it comprises fifteen action points, of which Action 5—the nexus approach—is of particular centrality to IP structures (OECD, 2015c).

Action 5 requires a direct nexus between the income benefiting from a preferential IP regime and the extent to which the taxpayer has itself actually conducted the underlying research and development (R&D) activities. Preferential tax treatment for IP-derived income may accordingly be claimed only where a substantial proportion of the qualifying R&D activity has been performed by the taxpayer itself within the benefiting jurisdiction. This requirement is operationalized through the so-called nexus ratio (OECD, 2015d). This ratio sets the taxpayer's own R&D expenditure and amounts paid to unrelated third parties in relation to total R&D costs, inclusive of intra-group expenditure and IP acquisition costs. The higher the proportion of R&D conducted directly or outsourced to independent parties relative to total expenditure, the greater the share of IP income eligible for preferential treatment. Groups that conduct their R&D in a high-tax jurisdiction while merely transferring legal title to the IP to a holding company in a low-tax jurisdiction will accordingly achieve a low nexus ratio, forfeiting the greater part of their tax privileges. An enterprise wishing to benefit from a patent box regime—such as those offered by Malta or Türkiye—must therefore ensure that the underlying R&D activity is genuinely carried out in that jurisdiction.

The second principal instrument at the international level is Pillar Two (OECD, 2021). Under the auspices of the OECD Inclusive Framework, more than 140 states have agreed upon a global minimum effective tax rate of 15% applicable to multinational enterprise groups with consolidated annual revenues exceeding €750 million. This regime applies with effect from the 2024 fiscal year. The framework rests upon three complementary and mutually reinforcing mechanisms. The primary rule is the Income Inclusion Rule (IIR): where the profits of a foreign subsidiary are taxed below the minimum rate of 15%, the parent entity is required to pay a top-up tax in its state of residence in an amount equal to the shortfall, thereby neutralizing the tax advantage conferred by the low-tax jurisdiction at the level of the ultimate parent (Englisch & Becker, 2019; OECD, 2024). Where the parent's jurisdiction of residence has not transposed the IIR into domestic law, the Undertaxed Profits Rule (UTPR) applies as a backstop. It empowers other states in which the group operates to collect the top-up tax on a pro-rata basis, thereby precluding deliberate circumvention of the regime through the selection of a passive holding jurisdiction. As a further complement, states may introduce a Qualified Domestic Minimum Top-up Tax (QDMTT) to secure their primary right to tax profits arising within their own territory before any foreign state may invoke the IIR or UTPR. Taken together, the three mechanisms constitute a comprehensive and interlocking system. Their overarching design ensures that group profits are subject to a minimum effective rate of 15% regardless of the jurisdiction in which the holding company is located. Pillar Two is projected to generate approximately USD 220 billion in additional global tax revenues annually (Tax Foundation, 2025), and the OECD estimated in October 2024 that approximately 90% of in-scope multinational enterprises would be subject to the minimum tax rate by 2025 (A&O Shearman, 2025).

The third and historically oldest instrument is the arm's length principle (OECD, 2022), which simultaneously constitutes the conceptual cornerstone of the entire international transfer pricing framework. It requires that intra-group transactions—in particular, the transfer and licensing of IP—be conducted on terms and conditions that would have been agreed upon between independent, unrelated parties dealing at arm's length. In the context of intangible assets, however, the application of this standard is particularly complex, given that IP is by its very nature unique and comparable market transactions frequently do not exist. The OECD Transfer Pricing Guidelines accordingly provide for specialized valuation methodologies to determine the arm's length price for the licensing or transfer of IP, including the profit split method and the discounted cash flow method (OECD, 2022). Where the intra-group price deviates from this benchmark, the tax authority is entitled to make an upward adjustment to the taxable base. In the context of BEPS, the transfer pricing guidelines were materially strengthened through Actions 8 to 10 (OECD, 2015b; Collier & Andrus, 2017), which require that intra-group IP transactions be aligned with actual value creation rather than with the mere formal legal ownership of the relevant assets.

3.2. Countermeasures at the Level of the European Union

At the level of the European Union, three coordinated instruments constitute the principal counterweight to aggressive IP holding structures: the Anti-Tax Avoidance Directives, the Mandatory Disclosure Regime, and the state aid control exercised by the European Commission.

The Anti-Tax Avoidance Directives (ATAD) represent the primary vehicle for transposing the OECD's BEPS recommendations into binding EU law (Council of the European Union, 2016). Unlike the BEPS action points, which merely furnished non-binding recommendations to Member States, ATAD imposes a legally enforceable obligation upon all EU Member States to implement its provisions in their domestic legal orders. The Directive comprises five mandatory anti-avoidance measures: the interest limitation rule, exit taxation, the General AntiAbuse Rule, the controlled foreign company rules, and the hybrid mismatch rules. Of particular relevance to IP structures are the Controlled Foreign Company (CFC) Rules. A foreign subsidiary is classified as a CFC where more than 50% of the voting rights, capital value, or profit entitlements are held, directly or indirectly, by the parent entity. A further condition requires that the actual corporate tax paid in the foreign jurisdiction amount to less than 50% of the tax that would have been levied in the parent's state of residence. Where these conditions are met, the undistributed passive income of the subsidiary—a category that typically encompasses IP royalty income—is attributed directly to the parent entity and taxed in the high-tax jurisdiction, irrespective of any actual distribution. An exception applies where the foreign entity is able to demonstrate that it carries on genuine substantive economic activity (European Commission, 2019). ATAD II, adopted on 29 May 2017, extended the framework to address hybrid mismatches involving third countries, as well as hybrid permanent establishment mismatches and imported mismatches (Council of the European Union, 2017). Imported mismatches are arrangements that exploit qualification conflicts between two tax systems in order to achieve double nontaxation. The General Anti-Abuse Rule (Council of the European Union, 2016) serves as a normative safety net for cases in which no specific anti-avoidance provision applies, empowering tax authorities to disregard arrangements that lack genuine economic substance.

The second instrument, operating primarily through deterrence, is the Mandatory Disclosure Regime introduced by Council Directive 2018/822/EU, commonly referred to as DAC6 (Council of the European Union, 2018). DAC6 requires EU-resident intermediaries, and in certain circumstances the taxpayers themselves, to report potentially abusive cross-border tax arrangements to the competent tax authorities within 30 days of implementation. The reported information is thereupon subject to mandatory automatic exchange among all EU Member States. The category of reporting intermediaries includes, in particular, lawyers, tax advisers, and auditors who design, market, or implement such arrangements. The reporting obligation is triggered by the presence of objective indicators—so-called hallmarks (Council of the European Union, 2018)—such as confidentiality clauses, standardized mass-marketed arrangements, or structures designed to circumvent the automatic exchange of information. The decisive effect of DAC6 lies less in direct sanctions than in its deterrent function: advisers and enterprises are compelled, already at the planning stage, to anticipate the disclosure obligation, thereby increasing both the cost and the complexity of aggressive IP arrangements.

The third and arguably most powerful instrument at EU level is the state aid control exercised by the European Commission pursuant to Article 107(1) of the Treaty on the Functioning of the European Union (Consolidated Version of the Treaty on the Functioning of the European Union, 2012b: Art. 107(1)). Where a Member State confers a selective advantage upon an individual undertaking through preferential tax arrangements not available to other enterprises, the Commission may classify such a measure as unlawful state aid and order its recovery. State aid law does not operate as a general prohibition of low tax rates but is directed with precision against individual fiscal favors granted by states that distort competition within the internal market. The effectiveness of the Commission's state aid control is vividly illustrated by the Apple case discussed above. In its definitive judgment of 10 September 2024 in Case C-465/20 P, the Court of Justice of the European Union confirmed that Ireland had granted Apple unlawful state aid through the tax rulings of 1991 and 2007. By virtue of those rulings, the IP licences and associated profits had not been allocated for tax purposes to the Irish branches. The Court accordingly ordered the recovery of €13 billion (Court of Justice of the European Union, 2024b). The judgment marks a watershed moment in European tax policy and demonstrates that the Commission is both willing and able to correct practices that have been tolerated for decades.

The growing resolve of national and supranational authorities to address cross-border profit shifting through corrective tax measures is further illustrated by the Google case in France. The French tax authorities investigated, from 2015 onwards, whether "Google Ireland" had, through its Double Irish structure, established a taxable permanent establishment in France to which a substantial portion of the advertising revenues generated in that country ought to have been attributed. Both the Paris Administrative Court and the Paris Administrative Court of Appeal initially ruled in Google's favor, setting aside the tax assessments (McDermott Will & Emery, 2020). The French authorities, however, generated such a degree of legal uncertainty through parallel criminal proceedings that Google ultimately capitulated and agreed to a settlement in the form of a non-prosecution agreement. Under its terms, "Google Ireland" paid a criminal fine of €500 million in respect of the period 2011 to 2016 and additional tax adjustments of €465 million for the period 2011 to 2018 (McDermott Will & Emery, 2020). Google had previously reached comparable out-of-court settlements in Italy, for €306 million, and in the United Kingdom, for £130 million (Fortune, 2016). The Google case thus illustrates an emerging enforcement strategy on the part of national tax authorities: the deployment of parallel criminal proceedings to compel settlements, even where the underlying civil tax position is favorable to the taxpayer.

4. Adaptive Strategies of Multinational Enterprises

As legislative efforts to curtail cross-border profit shifting intensify, multinational enterprises continuously adapt their tax planning structures to the newly enacted anti-avoidance norms.

By way of illustration, consider an enterprise that transfers its IP to a subsidiary incorporated in a tax-favored jurisdiction under the classical IP holding structure. The countermeasures established by legislators render this model vulnerable to challenge. The agreed royalty rate will not withstand arm's length scrutiny where the essential value-creating functions remain situated in the high-tax jurisdiction, notwithstanding the formal transfer of IP. Such functions include the location of the development personnel, the formulation of corporate strategy, the assumption of market and product risk, and direct customer contact. The actual value creation occurs not within the IP holding company but within the operating entity in the high-tax jurisdiction. Relying upon the arm's length principle (OECD, 2022) in conjunction with the strengthened OECD Transfer Pricing Guidelines under BEPS Actions 8 to 10 (OECD, 2015b), the tax authority is empowered to make profit adjustments, to impose taxation on business restructurings, or to disallow excessive royalty payments for tax purposes. This position is further reinforced by the CFC rules under ATAD (Council of the European Union, 2016), which attribute the passive income of low-taxed subsidiaries directly to the parent entity.

A more recently developed IP holding structure responds precisely to this vulnerability and offers a sophisticated solution. Under the so-called entrepreneur structure, the IP holding company no longer functions as a mere licensor but is reconceived as the entrepreneurial headquarters of the entire business model (European Commission, 2019). It is the legal and beneficial owner of the IP, takes the strategic decisions, bears the principal entrepreneurial risks, and acts as the principal vis-à-vis the operating entities. The operating entities, by contrast, are restructured as pure service providers. They no longer perform development, distribution, or manufacturing activities on their own account but do so on behalf of and at the direction of the IP holding company, receiving in return an arm's length, routine service fee calculated on a cost-plus basis (Council of the European Union, 2017). The entrepreneur structure thus inverts the allocation of roles within the corporate group, fundamentally shifting the attribution of taxable profits. The structural logic of this approach is illustrated in **Figure 4**.

This inversion carries the decisive advantage of systematically circumventing the anti-avoidance mechanisms identified above by deliberately avoiding the conditions that trigger their application. The arm's length principle and the strengthened transfer pricing rules lose their point of attack (OECD, 2022), since the IP holding company now genuinely performs the value-creating functions. It takes entrepreneurial decisions, bears development, market, and product risks, and

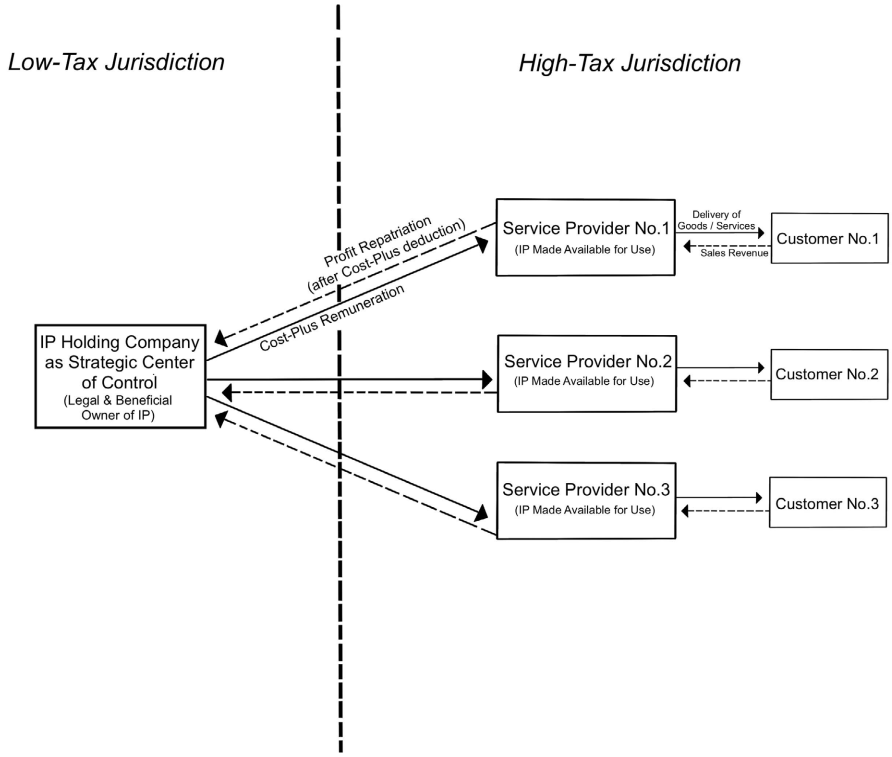

Figure 4. Architecture of the entrepreneur structure. Source: Author's construction.

actively directs the operating business. Royalty payments are eliminated altogether as a structural consequence, and the operating entity receives merely an arm's length cost-plus remuneration for its services. This framework leaves no room for excessive, profit-shifting royalties and simultaneously renders the CFC rules under ATAD inapplicable, since those rules are directed primarily at the attribution of passive income derived by a substance-deficient holding entity (Council of the European Union, 2016). The IP holding company within the entrepreneur structure is, however, precisely not substance-deficient. It is staffed by genuine decision-makers, bears authentic entrepreneurial risk, and generates active income from its function as the group's management center.

The entrepreneur structure escapes the OECD nexus approach by virtue of the fact that the IP holding company, as the economic and legal center of the group, directs and finances the research and development activities through contract research and development arrangements (OECD, 2013, 2022). The operating entities carry out the research physically, but do so at the risk and for the account of the IP holding company, with the result that the nexus ratio falls out favorably (OECD, 2015d).

As regards Pillar Two, while the global minimum tax of 15% establishes an absolute floor below which no further tax saving is achievable (OECD, 2021), entrepreneur structures are not directed at zero-tax jurisdictions but rather at low-tax jurisdictions offering substantial patent box regimes (Tax Foundation, 2024a), whose effective tax rates frequently fall just above the 15% threshold and thus formally satisfy the Pillar Two requirements, while nonetheless affording material tax advantages relative to high-tax jurisdictions such as Germany, with its effective tax rate of approximately 30% (Bundesministerium der Finanzen, 2026).

The entrepreneur structure is accordingly not a simple tax avoidance device but a substance-based reorganization of the corporate architecture that, in large measure, withstands the demands of modern anti-avoidance norms.

5. Reform Perspectives in International IP Taxation

What emerges from the foregoing analysis is that future countermeasures must be directed at the foundational model of the IP holding structure itself, rather than at its symptomatic manifestations, and must be designed in such a way as to resist circumvention through structural modification. The incentives for profit shifting could be substantially reduced if the deployment of proprietary IP and the use of third-party IP were to attract comparable tax consequences. One conceivable approach would be to disallow royalty payments as a deductible business expense altogether. An alternative would be to permit a notional deduction for deemed royalty expenditure in respect of self-used IP. Both approaches are, however, unlikely to prove politically viable, raise serious constitutional concerns, and would, in an international context, constitute a unilateral departure from prevailing fiscal norms. A comparative legal survey of the treatment of such arrangements across jurisdictions reveals a markedly inconsistent picture. Those states that function as preferred IP holding locations in particular consciously acknowledge the high mobility of intangible assets and seek to derive fiscal benefit from the mobility of the tax base (OECD, 2023; Tax Foundation, 2024b). This constitutes a structural conflict of interest that substantially impedes multilateral solutions.

It therefore appears necessary to identify points of intervention within the structure itself. The appropriate starting point is the process of implementing the structure—that is, the moment at which intangible assets are transferred to the IP holding company. A prohibition-level deterrent effect could be achieved through the comprehensive identification and taxation of all hidden reserves at the moment of the IP transfer, including assets not reflected on the balance sheet, such as internally generated intangibles that are not eligible for recognition as assets under applicable accounting principles. Where the latent appreciation in value of the IP is fully disclosed and taxed at the point of departure, the economic attractiveness of the downstream profit shifting through royalty streams is substantially diminished.

The normative appeal to taxation at the place of actual value creation, however, demands operationalization if it is to function as a judicially and administratively workable allocative standard rather than a mere programmatic aspiration. The most analytically rigorous framework currently available for this purpose is the DEMPE function analysis developed under BEPS Actions 8 to 10 (OECD, 2015b; Collier & Andrus, 2017), which disaggregates the value creation process associated with intangible assets into five constituent functions: the Development, Enhancement, Maintenance, Protection, and Exploitation of IP. Under this framework, the jurisdiction entitled to tax IP-derived income is not determined by formal legal ownership but by the location in which each of these functions is substantively performed. An entity that merely holds title to IP while outsourcing all DEMPE functions to affiliates in other jurisdictions would, on this analysis, be entitled to no more than a risk-free return on its financial contribution. Beyond functional analysis, two further criteria are indispensable to a robust allocative test. First, the locus of risk control: the capacity to make meaningful decisions regarding the assumption, management, and mitigation of the financial risks associated with IP development and exploitation must be genuinely exercised within the jurisdiction asserting taxing rights, not merely formally attributed to that jurisdiction through contractual arrangements (Wittendorff, 2010). Second, the source of funding: where an entity provides capital for IP development without exercising genuine control over the associated risks, it is entitled, consistent with the arm's length principle, only to a return commensurate with that of a passive financier rather than to the entrepreneurial profits generated by the IP (Danon, 2021). The systematic integration of these three criteria, namely DEMPE function performance, substantive risk control, and economically meaningful funding, into a binding international allocative norm would provide tax authorities with a precise and manipulation-resistant instrument for identifying the jurisdiction of genuine value creation, and would thereby translate the principle of source-based taxation of IP income from rhetorical commitment into enforceable legal reality.

Whether an IP holding structure ultimately proves successful in securing a material tax advantage for the group depends critically upon the tax treatment accorded to the IP-derived income at the level of the holding entity. Beyond the nominal corporate income tax rate, particular attention must be paid to preferential tax incentives in the form of patent box regimes, reduced rates on royalty income, or R&D tax credits. Such measures are designed to attract IP, to encourage the development of new intangibles, or at least to render the migration of existing IP positions fiscally less attractive. As long as such preferential incentives persist within the international tax competition landscape and states continue to offer fiscal inducements for the establishment of IP holding companies, structural countermeasures will inevitably reach their limits. A sustainable solution ultimately presupposes a coordinated international harmonization of the tax treatment of IP-derived income. The political feasibility of such an objective must, however, be assessed as severely constrained, given the fundamental divergence of national interests. All the more urgent, therefore, is the need for the international legislator to treat the prevailing reform pressure as an impetus to fundamentally advance the architecture of the global tax system, ensuring that the taxation of IP-derived income henceforth occurs where the actual value creation takes place.

6. Conclusion

The present analysis has demonstrated that IP holding structures represent considerably more than mere tax avoidance devices. They are the expression of a fundamental tension between the economic realities of the digital age and the limitations of a tax law framework rooted in an earlier era. The countermeasures adopted at the international and European Union levels attest to a genuine legislative will to address this development.

BEPS, Pillar Two, the arm's length principle, ATAD, and the state aid control exercised by the European Commission together constitute a multi-layered defensive framework that has progressively gained in coherence and enforcement capacity. The cases of Apple and Google further illustrate the growing resolve of authorities to counteract profit shifting abroad, while simultaneously revealing that arrangements tolerated for decades could only be corrected through protracted and resource-intensive proceedings. This exposes not merely enforcement deficits but also the inherent weaknesses of a regulatory framework that operates perpetually in a reactive mode and thus invariably finds itself one step behind structural adaptation.

This dynamic is illustrated with particular force by the entrepreneur structure, which demonstrates that tax planning arrangements do not merely respond reactively to anti-avoidance norms but actively anticipate them and seek to circumvent them through substance-based corporate reorganization. Legislative countermeasures that address only the symptoms of profit shifting will therefore continue, in the medium term, to be overcome through structural adaptation. Over the long term, the effective containment of IP-related profit shifting can only succeed if the principle of taxation at the place of actual value creation is enshrined as a binding foundational norm of international tax law and if a sufficient degree of international coordination at least constrains the structural tax competition among jurisdictions.

Diverging interests among different actors, however, stand in opposition to such an approach and thus constitute a fundamental and complicating challenge for any corresponding regulatory response. The societal dimension of this problem must not be underestimated. Profits generated through the use of public infrastructure, state-funded research, and legally secured markets are, through IP transfers, removed from the tax base of precisely those states that created the conditions enabling their generation. This not only undermines the fiscal capacity of the affected states but, over the long term, threatens the social legitimacy of a tax system that distributes the burden unequally between domestic enterprises on the one hand and private individuals on the other. This contribution is accordingly intended not merely as an analytical survey of the current state of affairs but equally as an impetus for legislators to engage constructively with the prevailing reform pressure and to advance the architecture of the international tax system in a targeted and purposeful manner. The objective must be to anchor the taxation of IP-derived income more firmly to the place of actual value creation, thereby securing both fiscal equity and the long-term legitimacy of the tax system.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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