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"The Bottom Calling the Top"—The Selling of Function (PSS) as a Business Model for Sustainability, in Need of Some Assistance from the Legislator

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“THE BOTTOM CALLING THE TOP”—THE SELLING OF FUNCTION (PSS) AS A BUSINESS MODEL FOR SUSTAINABILITY, IN NEED OF SOME ASSISTANCE FROM THE LEGISLATOR

by

*Olle Karlsson and Jan Kellgren**

When it comes to policy issues, a legal scholar would traditionally study sustainable taxation from a “top-down” perspective, thus focusing on the legislator and on rational ways to steer economic life in a more sustainable direction. Here, we start at another end—we think of it as “the bottom-calling-the-top” perspective—in order to highlight (1) a relatively new business model and its merits from a circular economy perspective, namely the so called Product Service Systems; (2) how this model faces initial problems regarding especially foreseeability and that it might therefore have problems making its breakthrough; and (3) thus might need help from the legislator. Business models typically emanate from economic life rather than from political discourse, hence the bottom-up perspective and the bottom-to-the-top expression. Within the “bottom-calling-the-top” perspective, the focus lies on the needs of the economic actors carrying out their business. This text will contribute to the integration of a “bottom-up” perspective into the sustainable taxation discussion, and we will illustrate how a proper dose of bottom-up perspective might contribute to a more viable discussion.

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I. INTRODUCTION AND RESEARCH APPROACH

When it comes to policy issues, a legal scholar would probably, and traditionally, have the ambition to study and discuss “sustainable taxation” (as well as most given legal topics) from a “top-down” perspective, thus focusing on the legislator and on rational ways to steer economic life in a more sustainable direction, through innovative tax law policy.¹

1. See, e.g., Walter R. Stahel, *Policy for Material Efficiency—Sustainable Taxation as a Departure from the Throwaway Society*, 371 PHIL. TRANSACTIONS ROYAL SOC’Y A, Mar. 2013, at 1, <https://doi.org/10.1098/rsta.2011.0567> (“This paper argues that a simple and convincing lever could *accelerate the shift to a circular economy, and that this lever is the shift to a tax system based on the principles of sustainability: not taxing renewable resources including human labour—work—but taxing non-renewable resources instead is a powerful lever.*” (emphasis added)); *Responsible Tax and the Developing World*, KPMG, <https://responsibletax.kpmg.com/page/responsible-tax-and-the-developing-world> (last visited May 31, 2020) (“creating sustainable tax systems that are broad-based, well-funded and administrable, accounting for complexities unique to each country—and fairly serving the interest of multiple parties. It means clearly defining the roles each side has to play. Sustainability is key. Tax will be part of (but not the only factor in) creating stable development.”)

Such a study might, as some kind of building block, include a part built on “the judge perspective,” often referred to as legal dogmatics, thus oriented towards studying the content of the legal rules (norms) and of the systematic order of those.

There is nothing wrong with such a top-down perspective; it has its given relevance. However, we would like to start at another end—we think of it as “*the bottom-calling-the-top*” perspective—in order to highlight (1) a relatively new business model and its merits from a circular economy perspective; (2) how this model (and most probably many other new business models) face initial problems regarding especially foreseeability and that it might therefore have problems making its (needed) breakthrough; and (3) thus might need help from the legislator and other actors within the field of law (including accounting law). Business models typically emanate from economic life, rather than from political discourse, hence the bottom-up perspective and the bottom-to-the-top expression. Within the “bottom-calling-the-top” perspective, as we see it, focus lies on the needs of the economic actors, carrying out their business. This text will contribute to the integration of a “bottom-up” perspective into the sustainable taxation discussion.²

The business model that we want to highlight and use as an example of the relevance of this bottom-up perspective, Product Service Systems (PSS),³ is, in many cases, quite promising in terms of effectiveness⁴ and environmental sustainability,⁵ but it needs both improved *policy* (laws) and more *know how* among buyers, sellers, and lawyers in order to make its breakthrough and deliver according to its full

2. At the universities of Linköping and Örebro, we are currently, and since a couple of years, doing interdisciplinary research, mainly from a legal perspective (including tax law) of these two new techniques, with funding from Swedish Energy Agency—in close cooperation with researchers within the Division for *Environmental Technology and Management (MILJÖ)*, LINKÖPING U., <https://liu.se/en/organisation/liu/iei/miljo> (last visited May 31, 2020). See, for example, Olle Karlsson et al., *Funktionsförsäljning och beskattning*, in SKATTENYTT: AKADEMISK ÅRSSKRIFT 2019, at 45 (2019), https://skattenytt.se/wp-content/uploads/2019/12/SN2019_akad_Karlsson-Kellgren-Kristoffersson.pdf. On the selling function, we have also been doing commissioned research for a large Swedish industrial company.

3. See Arnold Tukker, *Product Services for a Resource-Efficient and Circular Economy—A Review*, 97 J. CLEANER PRODUCTION 76 (2015).

4. Mattias Lindahl, *Key Issues When Designing Solutions for a Circular Economy*, in DESIGNING FOR THE CIRCULAR ECONOMY 113 (Martin Charter ed., 2018).

5. Mattias Lindahl et al., *Environmental and Economic Benefits of Integrated Product Service Offerings Quantified with Real Business Cases*, 64 J. CLEANER PRODUCTION 288 (2014).

potential. We will use this business model, and its needs, to illustrate how a proper dose of bottom-up perspective might contribute to a more viable discussion on sustainable taxation. There are of course other business models, with more or less similar potential and similar challenges, yet these are excluded with reference to the aim and to the limitations of the format for this Article. We like to believe, however, that the points made in this Article will be of relevance for the successful handling of other innovative business models.⁶

Many things can be meant by “sustainable taxation.”⁷ Sustainability may, for example, be seen as mainly concerning *the tax system as such* and its functioning over time. In that case, qualities such as normative coherence, legal clarity, legitimacy, a stable tax base, adaptability to new economic phenomena, etc., are likely to be highlighted as integral for sustainability. Most often, however, the discussion on sustainable taxation seems to be oriented towards how the tax system might work to push society towards higher levels of some goal or quality that is mainly relevant *outside of the tax system as such*. One obvious example, in this context, of such an external goal that could be made more sustainable is the environment. There are, of course, countless aspects of things that might have the ability (or not) to be maintained at a certain rate or level, so “sustainability” could concern highly different questions, fields, and qualities, for example, various social or economic goals. Here, though, we discuss sustainability from an *environmental* perspective; the theme thus being how the tax system might be constructed to reduce the stress on nature. Different methods might be used for this purpose, for example, prohibitions or excise duties, but this

6. We would, however, like to briefly mention the Balanced Thermal Grids: These grids are channels (pipes and caverns, etc.) for transportation, and sometimes storing, of low-energy carriers. Energy is added to, or withdrawn from, the grid with the help of heat exchangers by those who are attached to the grid. These grids favor resource efficiency in society and reduce energy loss. The technique needed to establish the grids exists and is reliable. However, the institutional framework is missing: The rules and regulations of the state and/or municipalities should at least not hinder the establishment of these grids, and contracting is made difficult since there are no contracting templates, making it possible for the parties to interact and to solve disputes. Also, here, (a) problematic (lack of) tax rules are part of what is missing in the institutional framework.

7. See, e.g., *Towards a More Sustainable Taxation Policy*, CORDIS, <https://cordis.europa.eu/news/rcn/129828/en> (last updated Aug. 20, 2018).

Article is concerned with reducing the stress on nature through the free choice of a business model that is based upon circular economy.

We aim to shed light on how the use of a promising and innovative business model can be held back due to the legal system, as current regulations leave many open questions and hard found answers regarding the legal effects of using a new business model. The legal system as such does not actively hinder the use of this business model (for example, there is certainly no legislation against it), yet, due to present gaps in the legal framework, it is difficult to promote such a model. A connected problem is that (potential) buyers, sellers, and lawyers are not prepared for the new and special characteristics of such business models nor for interpreting and/or applying the law in relation to it—this, however, is not shown in the Article, but is sometimes related to what follows below. We will also argue that this “bottom-calling-the-top” perspective can be very important for tax research as well as for policy makers, educators, and others, as it appears to be necessary for new promising ideas, emanating from economic life, to actually get their breakthrough. After all, steering choices through law (top down) is not always the key, especially with regard to ideas already existing and emanating from economic life. Here, clear and rational rules might be all that is needed, but that is also crucial.

The Swedish legal system will be used to illustrate relations, mismatches, gaps, etc., between civil law, accounting law, and tax law. Hence, the rules are primarily Swedish. When it comes to accounting issues, however, we use International Financial Reporting Standards (IFRS) (some references are also made to local Swedish accounting standards). We have reason to believe the situation to be fairly similar in many countries, as regarding the nature of the overall problem here described. New business models can cause different kinds of problems, often due to the fact that they are not anticipated by the legislator, by the actors in the business sector, or by lawyers, accountants, etc. One main type of example of this, and the kind of problem highlighted in this Article, is legal uncertainty. Legal uncertainty in such cases is typically a result of the business model not resembling common previous business models in some (or many) perhaps legally relevant respect(s). Needless to say, it is common for new business models or other sorts of new social phenomena to not be easily related to existing rules (including case law, etc.) when the law is to be applied. The other main type of problem is that the effects of the law, except from its lack of foreseeability, might be somehow irrational in dealing with new business models. Such irrationality can take many different shapes and forms but

often concerns the new business model being disadvantaged or advantaged compared to similar models.⁸ In our view, PSS's are slightly disadvantaged compared to other business models when it comes to some civil law effects, but not significantly so, and probably not within the field of income taxation. However, legal uncertainty can indeed be seen as a problem, and on this, we will focus below.

II. THE PSS BUSINESS MODEL AND ITS POINT FROM A CIRCULAR ECONOMY PERSPECTIVE

Our example of a business model suited for boosting sustainability is the business model *Product Service System* (PSS, also known as integrated product service offerings (IPSOs),⁹ industrial product-service systems (IPS²),¹⁰ or functional sales¹¹). In a PSS business model, what is sold is a *function* instead of physical goods or traditional services. This function may, for example, be “light” or “power by the hour.”¹² Here,

8. For example, the Uber business model managed to slip between different sets of rules regarding responsibility, etc., and in Sweden financial leasing helped in placing tax benefits to tax subjects best in need of them. For natural reasons, business models disadvantaged by the law will not flourish but rather will be abandoned or modified, unless the law gets changed (perhaps after lobbying).

9. See Sofia Lingegård & Niclas Svensson, *Scenarios for Resource Efficient Rail Infrastructure—Applying Integrated Product Service Offerings*, 16 *PROCEDIA CIRP* 134 (2014).

10. See H. Meier et al., *Industrial Product-Service Systems—IPS²*, 59 *CIRP ANNALS—MANUFACTURING TECH.* 607 (2010); Erik Sundin & Mattias Lindahl, *Rethinking Product Design for Remanufacturing to Facilitate Integrated Product Service Offerings*, ISEE '08: *PROC. 2008 IEEE INT'L SYMP. ON ELECTRONICS & ENV'T*, <https://doi.org/10.1109/ISEE.2008.4562901>.

11. See Mattias Lindahl & Gunilla Ölundh, *The Meaning of Functional Sales*, 8TH *CIRP INTERNATIONAL SEMINAR ON LIFE CYCLE ENGINEERING—LIFE CYCLE ENGINEERING: CHALLENGES AND OPPORTUNITIES* 211 (2001); Gunilla Ölundh & Sofia Ritzén, *How Do Functional Sales Affect Product Development and Environmental Performance?*, DS 31: *PROC. ICED 03: 14TH INT'L CONF. ON ENGINEERING DESIGN* (2003), <https://www.designsociety.org/publication/38/DS+31%3A+Proceedings+of+ICED+03%2C+the+14th+International+Conference+on+Engineering+Design%2C+Stockholm>.

12. David J. Smith, *Power-by-the-Hour: The Role of Technology in Reshaping Business Strategy at Rolls-Royce*, 25 *TECH. ANALYSIS & STRATEGIC MGMT.* 987 (2013).

the function is performed and achieved through methods and equipment chosen by the provider (seller), who is also free to change the way (the technique by which) he provides the function agreed upon—as long as the desired function is still actually provided.

The function is often provided through a combination of (1) the usage of equipment, which is placed, not seldom also installed, at the customer’s business during the contract period, and (2) certain services (e.g., maintenance, operation, or other actions that are necessary for the performance of the function agreed upon). The equipment might very well be exchanged by the provider and perhaps placed at another customer’s facilities, if doing so helps the provider to effectively meet the needs of his customers.

Research shows that PSSs have the potential to increase resource efficiency (including energy) and to reduce the environmental impact of business enterprises, mainly because focus is shifted from selling products to, instead, fulfilling functions, for example, lighting, from a life-cycle perspective.¹³ Without scientific ambitions in this part, there are a couple of explanations as to how and why this is not seldom the case (here, we only cover environmental advantages, but there are other kinds):

First, the business relationship within a PSS is often long-lasting and can give both parties a valuable exchange of knowledge and expertise, which can assist in optimizing how the agreed upon function is provided (e.g., more effective services, service usage, and equipment design). A long-lasting business relationship can therefore provide both parties with a non-fluctuating long-term cash flow.¹⁴

Second, the business model would most likely result in significant decisions about the method of how the function is to be created and provided—e.g., what equipment is to be used, how it is to be maintained and adjusted, etc.—being taken by a true expert (the PSS provider) rather than by an actor who is specialized at something completely different.¹⁵ It is very likely that an expert at, for example, lighting is better than the leader of a school or a small audit firm at choosing and

13. See Lindahl, *supra* note 4; Lindahl et al., *supra* note 5.

14. See Lindahl, *supra* note 4; Johannes Matschewsky et al., *Designing and Providing Integrated Product-Service Systems—Challenges, Opportunities and Solutions Resulting from Prescriptive Approaches in Two Industrial Companies*, 56 INT’L J. PRODUCTION RES. 2150 (2018).

15. See Lindahl, *supra* note 4.

operating such technology and the equipment needed to perform a certain level of lighting.

Third, the selection of equipment can also be continuously upgraded or switched by the PSS provider in order to better fulfill the needs of both parties of the PSS. For example, redundant equipment can be moved and be used elsewhere, and old technology can be replaced, upgraded, or otherwise adapted to the technological development, thus ensuring a more effective usage of the equipment.

Fourth, a PSS provider who has many customers is also free to move his assets after an analysis regarding needs, efficiency, etc., in a much more efficient way than if the end users themselves have to do this (for example, via the secondhand market or by borrowing or swapping with each other).

Lastly, the PSS model and its focus on the function, instead of the material product, could mean that the supplier takes a life-cycle responsibility for the solution (products and services) that is used to fulfill the desired function, which often means an increased focus on resource- and energy-efficient technology as well as on technology with a long lifetime, and that is also easy to service and maintain—or indeed, ideally, is maintenance-free.¹⁶ The driving forces for said life-cycle responsibility are very different from the forces regarding traditional product sales, where products with limited economic life span and high service requirements might indeed be seen as, and be, something quite profitable—for the seller. For the buyer, the effectivity in the economy and the environment, it is another story, as many new products and frequent services in many cases are far from desired or resource effective.

III. PSS AND INCOME TAXATION—WHY THE LACK OF FORESEEABILITY?

A. Uncertainty and Foreseeability Within Unlegislated Areas of Law

The first thing to take into consideration when trying to determine the income tax consequences—as well as any other legal consequences—of

16. See NEW BUSINESS FOR OLD EUROPE: PRODUCT-SERVICE DEVELOPMENT, COMPETITIVENESS AND SUSTAINABILITY (Arnold Tukker & Ursula Tischner eds., 2006); Lindahl, *supra* note 4; Arnold Tukker, *Eight Types of Product-Service System: Eight Ways to Sustainability? Experiences from SusProNet*, 13 BUS. STRATEGY & ENV'T 246 (2004).

a PSS contract, is that the hereinabove described PSS model is—as of yet—not a recognized legal concept within Swedish law. That is to say, there exists no legislation, or other regulation, that specifically strives to regulate the legal consequences of a PSS contract. So, the fact that two contractual parties would choose to structure their contractual arrangement in a manner according to the hereinabove PSS model and choose to call it a PSS contract would not result in the application of a PSS specific income tax provision. It would instead be necessary to look towards existing legislation and rules, written with other and older business models in mind, in order to determine the income tax consequences of a PSS contract.

This lack of specific legislation and regulation is not unique to the PSS model, as the same absence of legislation exists—within both civil and income tax law—regarding lease contracts concerning moveable property. The lack of legislation is not in itself a quality that results in problematic income taxation or problematic application of the income tax law, as there are many cases where general rules and principles can be both easily and suitably applied on unlegislated (new or old) phenomena. However, the lack of legislation, combined with the fact that the PSS model constitutes a substantial shift from the traditional business models upon which current legislation is built, gives rise to substantial issues regarding the foreseeability and clarity of the application of income tax law. Basically, switching from selling goods and traditional services to function through installing equipment at the customers facilities “blurs the legal roadmap,” as it was drawn for quite another way of doing business.

Given enough time, case law, legal doctrine, and business practices would straighten out many of the legal consequences of the PSS model, and thus end, or at least lessen, the foreseeability issues. A good example of this can be found in how Swedish income tax law has dealt with financial leases. For many years, there was great uncertainty regarding the legal substance of a financial lease contract, and it was heavily debated—both in civil law and income tax law—whether such contracts would, or should, be classified as a lease or sale of property. Since the first arrival of the financial lease, there have been a substantial amount of legal cases that have addressed, and sought to answer, these questions,¹⁷ and it would appear that the income tax consequences of a

17. *E.g.*, Regeringsrättens årsbok [RÅ] 1987 ref. 166 (Swed.); Regeringsrättens årsbok [RÅ] 1989 ref. 62 I–II (Swed.); Regeringsrättens årsbok [RÅ] 1998 ref. 58 I–III (Swed.).

financial lease have been substantially figured out (although the demarcation between different legal categories can still sometimes be tricky).

However, financial leases can also be a good example of why it could be favorable for the legislator to take active steps to legislate and clarify the legal consequences of new business models. The many complicated cases that reached the Supreme Administrative Court could signify that the income tax consequences of a financial lease were for a long time unclear for both the tax subjects and the Swedish Tax Agency.

It is our assessment that the PSS model is the same zone of legal unclarity that the financial lease previously was in. The lack of legislation and regulation can cause some issues, as hereinafter described, and these issues could act as an obstacle for the PSS model's breakthrough as a viable alternative to the more traditional business models. The issues could perhaps be solved in time through the courts, legal practitioners and researchers, accountants, etc., but that will take many years, and the issues could also be dealt with through legislative efforts. When it comes to accounting issues, however, those are only dealt with indirectly by the courts, as, under Swedish Law, the correctness of financial statements cannot be tried in itself but only as a prerequisite in certain other cases (mostly tax issues); thus, court cases on accounting rules are (besides being so slow that most accounting rules are often already changed) not precedents in the traditional sense, making the production of guiding case law especially tricky, if not impossible.¹⁸ Unless the law is clarified, legal uncertainty will typically result in the investors/actors demanding a higher imputed rate of interest, thus preventing the use of a beneficent business model.

Our main point in this Article is not the legal details as such but rather the problems and thoughts they give rise to. Needless to say, however, we need to at least illustrate the nature of these details and problems. For those of you wanting to "take the fast route" and go straight to the points in the end, the point in this Article is, metaphorically speaking, that the PSS business model means such a significant deviation from traditional business models that the legal roadmap only vaguely shows the way, and it will take time to draw even a decent updated such map. Meanwhile, a useful business model would perhaps not make its full breakthrough.

18. See JAN KELLGREN & JAN BJUVBERG, *REDOVISNINGEN OCH BESKATNING, STUDENTLITTERATUR* (2014).

B. The Legal Issues and Obstacles Concerning the PSS Contract

The PSS contract is—at least from a legal perspective—the most important aspect of the PSS model. It is within the PSS contract that the PSS provider's obligation to perform and provide a certain function arises, as well as the PSS provider's right to receive payment in exchange for the provided function. From an income tax perspective, it is important to determine what the income tax consequences of the PSS contract is. For the PSS provider, this an assessment on whether the right of payment constitutes taxable income and to what taxation period it would be allocated. Within Swedish business taxation, it is often easy to determine whether an income should be taxable or not, as all income from the tax subject's business operations are taxable, unless an exception is stated within the income tax code.¹⁹ The classification of the PSS contract would not have any significant effect on this assessment, and thus the fact that right of payment originates from a PSS contract would not be the cause of any issues in this regard. The complexity of the income tax consequence of a PSS contract does instead primarily refer to the assessment of the taxation period that the taxable income should be allocated to.

The main rule within Swedish income taxation is that income and expenses are allocated to different taxation periods on the basis of generally accepted accounting principles (GAAP) and the taxable subject's books of accounts, unless specific tax provisions states otherwise.²⁰ This relationship between accounting and income taxation is mostly known as the linked area and is heavily prominent in the allocation of taxable income, due to a lack of income tax provisions regarding allocation of incomes. This means that GAAP is of great importance when determining the correct taxation period and that incomes will primarily be recognized on a realization concept basis.²¹ It is in this assessment of whether an income is realized or not that the classification of the PSS contract is a vital, and complicated, part.²²

19. 15 ch. 1 § INKOMSTSKATTELAG (Svensk författningssamling [SFS] 1999:1229).

20. *Id.* at 14 ch. 2 & 4 §§.

21. 2 ch. 4 § 3 b ÅRSREDOVISNINGSLAG (Svensk författningssamling [SFS] 1995:1554).

22. See KELLGREN & BJUVBERG, *supra* note 18, at 100–04.

Since PSS is neither a recognized legal nor an accounting term or concept, it is necessary to classify it under an already recognized term (or terms). It is thus necessary to determine what current classification alternatives best suits different PSS contracts. For example, should a PSS contract be classified as a sale of services, a lease, or something else entirely? Or perhaps as a hybrid, to be divided into different parts?

On one hand, a PSS contract shares some similarities with a traditional lease contract. Both types of contracts involve the placement of a material object at the customer's place of business in exchange for some sort of payment. At first glance, it appears that the PSS contract would fall under the lease definition stated in IFRS 16,²³ and that the PSS contract would thus—for accounting and income taxation purposes—be classified as a form of lease contract. However, this might not be entirely suitable, as the obligation to perform a certain function does, in many ways, differ significantly from the lessor's obligation to provide the lessee with a right of use to a certain material object. The most important difference between them is that the obligation to provide a function is not tied to the act of providing the customer with the right of use to an identified asset, rather the PSS provider should—at least in theory—be free to independently choose what type of equipment is to be used, and therefore how and for what purpose the equipment is to be used.²⁴ This could signify that essential criteria in the IFRS 16 lease definition are not fulfilled and that the PSS contract would therefore not be classified as a lease.²⁵

Another aspect of PSS, which potentially separates it from a lease agreement, is that the obligation to perform a function is, at least in theory, much wider than just the act of providing the right of use to an asset. The obligation to perform a function should—at least in theory—mean that the PSS provider is obligated to take every action necessary for the PSS user to receive the function agreed upon. Such actions can include the action of servicing the equipment used in the sale of function, such as manual labor in the operation of the equipment. The fact that the obligation to perform a certain function can include a wide range of different activities could signify that the real substance

23. INTERNATIONAL FINANCIAL REPORTING STANDARD 16 ¶¶ B9–B33 (IFRS Found. 2018).

24. *See supra* Part II.

25. INTERNATIONAL FINANCIAL REPORTING STANDARD 16 ¶¶ B13–B19, B24–30 (IFRS Found. 2018).

of the PSS contract is that of several distinct performance obligations that should be taxed separately. In this assessment GAAP, and especially IFRS 15, provides guidance for the participants of the PSS contract. IFRS 15 contains extensive rules and guidance on how an entity is to identify whether its contract with a customer contains several distinct performance obligations that should be accounted for independent of one another. IFRS 15 defines a performance obligation as every promise (explicit or implicit) by the entity to transfer the control of a distinct service or good (or, in some situations, a series of distinct services or goods)²⁶ to the customer.²⁷ The key here being that the service or good must be distinct from other promised services or goods. It could here be argued that separate activities necessary to provide the function are of such a nature that a PSS user could acquire them separately and that there is a clear enough difference between them to say that they are distinct from one another within the context of the PSS contract. However, it could also be argued that separate activities are integrated with one another in such a way that they form one single output—i.e., the agreed upon function.²⁸ A PSS contract would most likely fall under the latter rather than the former, and the obligation to provide a function should be recognized as a single performance obligation.

Even though both IFRS 16 and IFRS 15 contains extensive and detailed rules on how transactions are to be classified, it appears that their application to PSS contracts is complicated. A big part of this complication stems from the uncertainty within civil law concerning the legal substance of a PSS contract. In this aspect, a response from the legislator regarding PSS and civil law could lead to a less complicated classification process within income taxation; however, it is even more important that government agencies and academic researchers work together with the business sector in order to clarify the interpretation and application of existing legislation and regulations. It could be that existing possible classifications, and their entailed legal consequences, can be found to be not entirely compatible with the PSS business model

26. For a series of distinct services or goods to be considered one performance obligation, they need to be substantially the same and follow the same method of transfer to the customer. INTERNATIONAL FINANCIAL REPORTING STANDARD 15 ¶¶ 22(B), 23 (IFRS Found. 2018).

27. *Id.* ¶ 22.

28. *Id.* ¶ 29(b).

concept. If that were to be the case, then new legislation that specifically handles PSS could be favorable.

C. Legal Issues and Obstacles Concerning the PSS Equipment

Another important aspect of the PSS business model is the equipment used by the provider to provide the agreed upon function. As previously mentioned, it is the aim of the PSS business model to move the focus of the transaction from material products to certain functions. The object that the PSS user has bought is neither the legal title to a certain material object nor the legal right to use a certain material object. Rather, the PSS user has bought the right to receive a certain function. Therefore, there does not exist an explicit obligation, or perhaps any obligation at all, for the PSS provider to utilize a material object to provide the function. However, in order to provide the function in an effective manner, it would in most cases be necessary to place some sort of material resource at the PSS user's business premises. The intention, at least in most cases, is that the PSS provider will retain the title of ownership to the material resource used in PSS. However, within Swedish property law there exists some statutes and principles that could result in the PSS provider losing the title of ownership, even though this was not the intention.²⁹

This can happen when the material object is installed within the PSS user's place of business in such a manner that it becomes a part of property owned by someone other than the PSS provider. This could lead to the material object losing its identity as a distinct property unit and, along with it, the PSS provider losing their legal title to the property. The consequences of such a loss can be that the material object used in the PSS can be seized as payment for the PSS user's other creditors—e.g., in case of the PSS user's bankruptcy—and, in some cases, that the PSS provider loses the right to legally dispose of the material object—i.e., the PSS provider cannot use legal means to separate and retake the installed

29. See Ingrid Arnesdotter, *Funktionsförsäljningsavtals ställning vid konkurs*, *INSOLVENSÄRÄTTSLIG TIDSKRIFT*, no. 2, 2019, at 29, <https://inrati.se/index.php/inrati/article/view/131/126>; Ingrid Arnesdotter, *JB 2 kap. 1 § 1 st.—ett hinder för funktionsförsäljning?*, in *FESTSKRIFT TILL GÖRAN MILLQVIST 67* (Lars Gorton et al. eds., 2019).

object.³⁰ This risk is not unique for the sale of PSS. The same situation can transpire in, for example, the case of a lease. However, in the case of PSS, the material object, which is installed at the PSS user place of business, and the installation itself are often of such a nature that the risk of merger and subsequent loss of distinct identity could be more prevalent.

For the PSS provider it is of course of importance whether the installation of the material object will compromise the PSS provider's title of ownership over said object. It is through the title of ownership that the PSS user gains the legal rights and means to control the (economic resource that the) material object (is). Thus, the title of ownership is an essential part in determining whether the material object should be considered and recognized as an asset in the PSS provider's balance sheet.³¹ If the installation of the material object can cause the PSS provider's title of ownership to be compromised, it could be assumed that it might also compromise the PSS provider's control over it as an economic resource. The question is whether the control has been so compromised that the material object can no longer be accounted for as the PSS provider's asset and that it therefore should be derecognized.³²

The fact that the material object can be seized and sold as means of payment for the PSS user's creditors, if the PSS user were to default on its debts, is a factor that lies outside of the control of the PSS provider and constitutes a substantial risk for the PSS provider's security in the sale of PSS. However, before the material object has been seized by the PSS user's creditors, the PSS provider can still demand the return of the material object. Therefore, the mere risk that the material object could be seized by the PSS user's creditors is most likely not enough for the PSS provider to lose control and derecognize the asset. We would argue, though, that the level of probability of this happening could be considered when derecognition is considered.

30. This can happen when two fused objects form such a functional unit that it would be unjust to separate them. See the work by Arnesdotter, *supra* note 29.

31. INT'L ACCOUNTING STANDARDS BD., IFRS FOUND., CONCEPTUAL FRAMEWORK FOR FINANCIAL REPORTING ¶¶ 5.6–5.11 (2018 rev.); INTERNATIONAL ACCOUNTING STANDARD 16 ¶ 7 (IFRS Found. 2018).

32. INTERNATIONAL ACCOUNTING STANDARD 16 ¶ 67 (IFRS Found. 2018).

The situation changes slightly in the situation where the installation of the material object has resulted in the PSS provider no longer having the legal right, regardless of whether the PSS user fulfills its obligations or not, to take back the object by legal means. In such a case, the PSS provider's ability to control the placement and usage of the material object could at any moment be hindered by the PSS user. If it is possible for the PSS user to continue using the material object without having to fulfil its side of PSS contract—i.e., to pay the agreed upon fee—then it could be argued that the PSS user no longer has the control over the material object and that it therefore should be derecognized. In this case, the PSS provider would have the right to receive damages for its loss of the material object, but nonetheless the PSS provider's right has changed from having the exclusive legal right to dispose over the material object to instead having the right to receive damages. However, the right to receive damages does not arise until the point of time when the PSS user refuses the separation and return of the material object—i.e., at the point of time when a conflict of interest arises. The PSS user is not obligated to refuse the separation and return of the material object. For the PSS provider it is hard to say for certain whether the installation has led to a loss of right to separate and retake the material object, and whether the PSS user will hinder such an action. It is a hard assessment to make, and it is not certain whether such a situation should lead to the material object being derecognized from the PSS provider's balance sheet.

After the PSS provider has determined whether to derecognize the material object or not, it is necessary to assess whether the material object should be deemed as disposed of, or in any other way lost, within the realm of income taxation. If the material object is deemed lost at the point of time of installation, the PSS provider should deduct the entire cost of acquisition, of the material object, under the taxation period during which the installation of the material object took place.³³ If the material object should not be considered lost, the cost of acquisition should be deducted through annual depreciation.³⁴ The fact whether the material object should be considered lost or not has a direct effect on the PSS user's income taxation, but it is not clear whether the loss of

33. 18 ch. 15 § INKOMSTSKATTELAG (Svensk författningssamling [SFS] 1999:1229).

34. *Id.* at 18 ch. 13 §.

right to retake the object should constitute a loss of the material object within the PSS provider's income taxation.

The assessment of whether an asset is to be considered lost is not part of the linked area between accounting and income taxation. Therefore, GAAP and the assessment the tax subject has made in its books of accounts are not directly governing for the tax subject's income taxation. It is rather the opposite—i.e., the income taxation contains its own principles on what criteria need to be fulfilled for an asset to be considered disposed of or lost. This can, for example, be seen in the case of a financial lease. In accounting standards such as IFRS, a financial lease would constitute a disposal of the underlying lease asset, and thus the lease asset would be derecognized.³⁵ However, within income taxation not all financial leases are considered to be a disposal of the underlying lease asset.³⁶ In some cases, the true legal substance of the financial lease is deemed to be a transfer of ownership over the underlying asset;³⁷ however, this assessment differs from the one made in accounting.

The fact that there exist discrepancies between income taxation and accounting regarding whether an asset is lost is not in itself an issue. However, things get more problematic when income tax provisions, such as 18 chapter, 14 § Swedish Income Tax Act, stipulate a so-called reverse connection. The cited paragraph states that, if discrepancies arise between the annual depreciation made in accordance to the tax code and the one made in the tax subject's books of accounts, then the tax subject loses the right to use a faster depreciation rate for its income taxation. This is usually achieved through the use of appropriations within the accounting. If the asset is derecognized for accounting purposes but remains an asset for income taxation purposes, then a discrepancy between the two arises and, unless adjusted through an appropriation, the tax subject loses their right to the more beneficial depreciation rate. To further complicate things, it would appear that there exists widespread uncertainty regarding how such an appropriation should be made in order to salvage the reverse connection between income taxation and accounting. The collected consequence of this is

35. INTERNATIONAL ACCOUNTING STANDARD 16 ¶¶ 67, 69 (IFRS Found. 2018).

36. *See, e.g.*, Regeringsrättens årsbok [RÅ] 1989 ref. 62 I-II (Swed.).

37. Regeringsrättens årsbok [RÅ] 1998 ref. 58 I (Swed.).

that it is complicated and hard for the tax subject to do right, within both income taxation and accounting.

IV. CONCLUSIONS

So, what can be learned from the above? Tentatively, we draw the following conclusions:

Economic life does not only produce new technology but also new and highly relevant business models that can contribute to saving the environment through supporting resource effective ways of conducting business. PSS is a promising business model, but its legal situation is, at least in some parts and cases, pretty complex and tricky. PSS will not reach its full potential just because it is promising; the institutional framework must also be at hand: The relevant laws must thus be, or be made, *easy to understand* in relation to the respective business model (by changing the letter of the law, through court practice or some other method); legal practitioners must get accustomed to handling such business models; companies must be made aware of them so that they are prone to choose them and then get used to using them rationally; these models must be properly understood within public procurement and, last but not least, *the legal consequences of using these models must be relevant*.

It is paramount for the legislator to “keep one ear to the ground” in order to pick up ideas and needs of the entrepreneurs, etc., not least to become aware of such relatively new business models as the PSS. Screening the economic scene through active dialog is thus essential as new ideas are constantly emerging but can be severely hindered by lacking, unclear, or otherwise poor rules. It is equally important for entrepreneurs, companies, NGOs, lawyers, and other actors to help the legislator by communicating their news, ideas, and needs. Needless to say, science can play an important role in this process finding through describing, problematizing, and evaluating (perhaps even improving) new ideas and through giving suggestions for policy improvements.

However, keeping one ear to the ground and finding out about news and needs is not worth much, unless, when needed, swift action is actually taken in order to support those models that are promising but in need of policy adjustments. Tax laws, as well as other rules, might thus have to be adapted and further developed. Action might, basically, concern clarifying rules or adjusting the legal consequences in one or many cases. At least in the case of PSS, the different fields of law interact with one another so much that there is a clear need for “inter(legal)

disciplinarity," thus integrating more fields of law than one. This goes for achieving both legal clarity and relevant legal consequences. A business model simply is not properly understood, and cannot be regulated in the best way, if looked upon from too narrow a viewpoint. First, however, such new models must be properly understood from a *wider* perspective than the legal. What are its technological, environmental, economic, etc., points, problems, and fundamentals? It goes without saying that lawyers cannot work alone in that process—or even play a leading part.

From a legal perspective, civil law often seems to be the best starting point. It would benefit from being clarified in some parts. It also needs to be discussed whether it is today rational, for example, regarding laws of property. Here, it seems that a law and economics perspective might give some relevant arguments. Needless to say, accounting is highly important in economic life—not seldom crucial for the choice between different business models, etc. Above we have highlighted a number of issues regarding the understandability and rationality in accounting law in relation to PSSs. It should here be underlined that the rules in no way expressly relate to PSSs or similar. This should not per se be seen as a problem, but the relative complexity of the business model indicates that PSSs have not yet been given sufficient attention.

In many countries, as in Sweden, accounting is also highly important for the income taxation of companies. Any unclarity or questionable legal consequence within accounting—and there are some—therefore creates a risk of spilling over to taxation. The remedy for this might be to change the tax rules. Another possibility is to change the accounting rules as they affect the income taxation. The latter is, however, problematic, both due to the fact that accounting fills many other purposes than taxational (you might thus cause one problem while solving another) and because it is far from easy to change the IFRS rules. As previously described, accounting can also, to some degree, be seen as a reaction to the rules within civil law and the economics these rules help in creating. Thus, in order to achieve optimal tax rules and taxation, it might sometimes very well be neither the actual tax rules nor the accounting principles that are to be changed, but civil law.

V. FINAL REMARKS

In order to be properly understood, as well as used and regulated in the best way, new business models, such as PSS, must be looked upon through a wide-angle lens. Thoroughly thought through and handled

well, by companies, lawyers, researchers, and not least legislators, PSS may very well prove to give a significant contribution towards a sustainable development, through its effects on the circular economy. This business model, its possible effects, and its “legal problems” are a fine example of how promising solutions, in the shape of innovative business models emanating from economic life rather than political discourse, can provide important keys on the way to a more circular economy, but also of how they must be cared for, so that they get their appropriate level of breakthrough. This example, and these questions, are, in our view, important aspects of what should be meant by “sustainable taxation” and integrated in that discourse.