
Online incorporation platforms in Estonia and beyond: How administrative spillover effects hamper international taxation*

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Abstract

Online platforms that allow non-residents to register firms have emerged to boost economic development goals in jurisdictions ranging from Wyoming (United States) to Estonia. They create novel governance challenges that fall between governance frameworks. The global tax governance agenda needs to address the role of such platforms, which often involve conflicts between economic policy aspirations and other goals. Our Estonian case study demonstrates the inability of authorities to perform background checks of numerous non-resident entrepreneurs, as national administrative capacities get strained. Building on the nascent tax spillover approach, we analyse administrative spillover effects caused by online incorporation platforms in international taxation. Mapping de facto administrative capacities requires analysing conflicts between governmental priorities and the obstacles of sharing information between administrative and criminal procedures. When the non-resident community grows compared with the size of the domestic economy, supervisory systems tailored for domestic entrepreneurs become strained. We show that resolving this policy conflict assumes targeted investments into administrative capabilities from skilled personnel to data exchange and interorganizational coordination.

Keywords: e-governance, e-residency, Estonia, money laundering, tax governance, tax evasion

JEL classification codes: M13, O16, O23, O52, P16

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1. Introduction

Registering small companies abroad used to be associated with international crime and the super-rich, or with holding companies of transnational corporations (TNCs). However, technological advances and digital business models have incentivized microentrepreneurs and small firms to incorporate in places such as Wyoming (United States) and Estonia. Driven by economic development logic, policymakers have sought to support online incorporation platforms through legislative, policy and service innovations. Such efforts can generate conflicts between governmental policy goals, calling attention to effective national administrative capacities to align diverse goals without compromising any of them. Drawing from a case study on the Estonian e-residency programme, we address a major gap in global tax scholarship by studying the governance challenges created by online incorporation platforms.

We argue that global tax scholarship needs to pay more attention to the growth of small-scale, “born global” (Cavusgil and Knight, 2015) entrepreneurs and the incorporation platforms that they use. We maintain that the growth of such platforms may result in a situation in which the collective governance impact of such entrepreneurs becomes significant despite the small economic significance of any single entrepreneur. Such situations create new kinds of challenges for national authorities and international organizations – such as the United Nations and the Organisation for Economic Co-operation and Development (OECD) – that are tasked to monitor their member States and advise them on policy issues.

Our research suggests that micro-entrepreneurs register companies abroad for four sometimes intertwined reasons: (1) the ease of managing firms, (2) access to digital infrastructure (e.g. PayPal), (3) access to new markets (e.g. the European Union) and (4) circumventing taxes and regulations. Given the overall scarcity of scholarship on online incorporation platforms, any of these rationales would merit a detailed study. However, we focus on the fourth reason as such activities undermine tax collection and anti-money-laundering efforts both nationally and internationally in ways that the existing literature does not cover.

We analyse the governance implications of this fourth rationale through an analysis of the Estonian e-residency initiative, which allows foreign citizens to obtain access to digital services provided by the Estonian Government, as well as to a range of private online services. We identify three governance failures that sustain this rationale: the unexpected spillover effects in the national supervision of e-residents, ensuing difficulties in supervising firms without taxable income and gaps in the international exchange of information. We argue that these administrative challenges and spillover effects should be considered also when discussing the “concept-measurement” gap of global economic governance (Mügge and Linsi, 2021).

By highlighting such spillover effects in an OECD country that is not a tax haven, we make an important contribution to the emerging body of literature on global tax

governance and national development strategies (Binder, 2019; Finér and Ylönen, 2017; Baker and Murphy, 2019; Stausholm, 2022). We also make a normative contribution by discussing how countries should balance their attempts to lure foreign investment and the associated administrative capacities. Such discussion is much needed in a situation where the pace of new major policy initiatives to curb international tax spillovers has stalled compared with the rapid policy innovation of the early 2000s and the 2010s (Picciotto, 2022).

The rest of the paper progresses as follows. The next section situates the paper in conceptual debates on tax governance and international business (IB). Section three outlines the methodological approach. Section four introduces online incorporation platforms and the Estonian e-residency programme. Sections five, six and seven tackle governance challenges arising from online incorporation systems, using Estonia as a case study. The penultimate section draws together the conceptual contributions of our findings, and the final section outlines our policy contributions.

2. The conceptual approach

Scholars of IB and international political economy have studied corporate tax avoidance and tax havens for more than 50 years. The modern research agenda for tax governance began to emerge in the late 1990s (Eden, 1993; Kindleberger, 1970; Strange, 1988; Sæveld, 2022; Ylönen and Finér, 2023). It was initially a small but multidisciplinary field, encompassing not only tax havens and their users but also online shipping registers, export processing zones and other discontents of the international race to the bottom in tax and financial regulation (Abbott and Hampton, 1999; Eden and Kudrle, 2005; Hampton and Christensen, 2002; Palan, 2003). Subsequently, the major growth of the policy agenda on tax governance – championed by the OECD, the European Union, the United Nations and other international organizations – steered scholarly interest to a narrower bundle of policy-relevant topics and quantitative research settings (Temouri et al., 2022).

The first current in this literature concerned taxation of TNCs (Cobham et al., 2018; Lips, 2019; Picciotto, 2018), while the second has focused on the exchange of information on financial assets (Ahrens et al., 2021; Lesage et al., 2020). These two strands of research have been complemented by studies on structures and actors in tax avoidance and evasion, from tax havens to financial service providers (Christensen, 2011; Christensen, 2021; Picciotto, 2022; Seabrooke and Wigan, 2022).¹

¹ Notable exceptions in the relative lack of attention on money laundering, financial crime and associated tax leaks in recent global tax governance literature include Binder (2019); Eggenberger (2018); Konalova, Tuck and Ormeño-Pérez (2022); Baker and Murphy (2019); and Sharman (2017).

In IB, the late 2010s saw a renewed interest in tax avoidance and tax havens, predominantly through quantitative studies on corporate profit shifting.²

Research agendas that rhyme with timely policy debates are needed, but they can also create blind spots, which consist of phenomena that are peripheral to prevailing policy agendas or remain outside them (Best et al., 2020; LeBaron et al., 2020). Online incorporation platforms constitute one such blind spot. They are used by micro- and small enterprises and involve policy challenges related to money laundering and financial crimes. These themes have been at the margins of the recent global tax governance literature, and they have been discussed mostly through case studies revolving around major financial scandals. Such studies are typically published in journals dedicated to research on financial crime and money laundering (Hoes and Kehler, 2020; Rose, 2022).

The nascent tax spillover approach has presented one attempt to bridge the gap between studies of corporate profit shifting, exchange of information on financial assets, and the actors and structures that sustain these phenomena (Baker and Murphy, 2019; IMF, 2014). In an important report on corporate tax flight, the International Monetary Fund (IMF, 2014, p. 1) defined spillovers in international taxation as “the effects of one country’s rules and practices on others”. Subsequently, Baker and Murphy (2019) argued that this framework should be broadened from corporate taxation to other tax classes and ownership structures (e.g. trusts). Following pioneering studies by non-governmental organizations and the Governments of Ireland and Denmark, they called for qualitative country assessments on tax spillovers. They argued that such assessments should study how tax spillovers emerge from the interplay between various tax items (such as personal and corporate income tax), country-specific ownership structures and possible flaws in administrative practices that sustain tax spillovers. We develop this argument by highlighting the complex and sometimes surprising ways in which such spillovers can occur in non-tax-haven jurisdictions.

3. Background and methodology

Studying online incorporation platforms is tricky. Company registers and official statistics of jurisdictions such as Wyoming offer little information on foreign companies, in line with their broader emphasis on financial secrecy (Shaxson, 2018). Financial secrecy hinders attempts to find relevant data for quantitative studies. Moreover, foreign entrepreneurs seldom promote their incorporation in secrecy jurisdictions, which complicates finding potential interviewees or other data for qualitative research

² For reviews, see Cooper and Nguyen, (2020) and Temouri et al. (2022).

settings. Estonia is an exception. Its e-residency programme has become a powerful tool of what the literature is calling “nation branding” (Tammppuu and Masso, 2018 and 2019), as this small Northern European country seems to have struck a balance between promoting both global entrepreneurship and its prudent regulation. Several active communities in social media exist for e-residency, and success stories are actively marketed by the e-residency programme and other Estonian State agencies. The programme’s merits and perils have been discussed in various assessments, and in a growing number of peer-reviewed articles (Blue, 2021; Calzada, 2021; Drechsler, 2018; Tammppuu et al., 2022; Tammppuu and Masso, 2018 and 2019).

With transparent governance structures, relatively flat hierarchies and a governance culture that supports interview-based policy research, Estonia provides a perfect location for a revelatory case study that illuminates the governance challenges associated with online incorporation platforms. Revelatory case studies involve opportunities “to observe and analyze a phenomenon previously inaccessible to scientific investigation” (Yin, 2003, p. 42). The governance challenges related to online incorporation platforms have been such a phenomenon. The underlying hypothesis for this paper is that, in addition to being a nation-branding exercise, Estonian e-residency should also be interpreted as part of the broader reconfiguration of economic residency. This reconfiguration is occurring in an era characterized by the international prominence of start-up ecosystems and born-global entrepreneurs.

The bulk of our research material consists of 30 semi-structured interviews conducted in 2020 and 2021 with three key stakeholder groups – civil servants, entrepreneurs, and service providers – who are familiar with the Estonian e-residency programme (annex table). Semi-structured interviews provide a useful method for obtaining information on an evolving initiative for which academic research is limited (Kallio et al., 2016). The first interviews were conducted as background interviews to facilitate the formulation and polishing of the interview guide. The interviews were driven by three goals. First, we aimed to understand the motivations and business strategies of entrepreneurs that use e-residency; second, the role of providers of e-residency-related services, which has been a blind spot in research; and third, to gain insights on governance aspects of e-residency from government officials and to mirror these insights with information gained from e-residents and service providers.³ Most interviews were anonymized to enable discussion of sensitive issues.

The first interviewees were found by contacting people who had commented on e-residency-related issues in public or who had dealt with issues related to the programme in their work. Following the “chain” or “snowballing” approach (Noy, 2008),

³ Three of the civil servants interviewed were from Finland, to cover the internationally unique information exchange arrangements between Estonia and Finland.

interviewees were asked for suggestions for other interviewees. Other interviewees were also found by approaching people who had been active in discussing e-residency in traditional or social media. The snowballing approach is useful for studying an evolving phenomenon characterized by close social networks among many members of each of the three interviewee groups, i.e. government officials, e-residents and intermediary firms.

Interviews typically began with open-ended questions such as “from which roles have you followed the e-residency initiative” and “how would you characterize the current state of the e-residency initiative”. Subsequently, they proceeded to discuss specific experiences that interviewees had encountered as e-residents, service providers or regulators. They concluded by discussing interviewees’ insights into how problematic issues should be alleviated – if such issues emerged – and who should be tasked to do this. Interview guides were tailored for each interviewee, which was necessary given the broad positioning of interviewees relative to the research theme. Interviews were continued with each of these groups until we reached “meaning saturation” (i.e. a sufficient understanding of key issues) (Hennik et al., 2016). Determining these points was further facilitated by the mixed-method setting, which enabled us to reflect the takeaways from the interviews against information obtained from textual sources. Specifically, insights gained from interviews were complemented with analysis of a range of other sources from government reports to media articles, as well as with information acquired from two industry seminars that focused on themes relevant to this article.⁴

Textual sources were sought by reviewing relevant, publicly available governmental reports and evaluations that had been mentioned in the assessments of e-residency reviewed. Relevant media sources were sought by searching the archives of the Estonian business newspaper *Äripäev*, the largest daily newspaper, *Postimees* and the website of the Estonian National Broadcasting Channel. The media and policy data were initially obtained for 2014–2020, but further updates were sought as research progressed, until the end of 2022. As noted, the purpose of these textual sources was to deepen our understanding of the e-residency programme and its effects and to validate insights gained from the interviews. Such mixed-method settings are typical for qualitative analysis of policies and their societal impact (Bowen, 2009).

⁴ The first of these industry seminars was organized in December 2020 and focused on the financial and regulatory risks associated with e-residency. The second seminar, in May 2021, discussed anti-money-laundering risks in Estonia. Both were organized by a private company called Finesto Advisors.

4. The nature of online incorporation platforms

Jurisdictions that offer online incorporation services can be grouped into two categories. The first category involves destinations that grant opportunities for private intermediaries to provide online company registrations. For example, service providers advertise Wyoming as a location for digitalized incorporation, board resolutions and annual meetings; minimum reporting requirements; zero taxes for foreign-sourced income; lax incorporation rules; and digital signatures. Locations offering varying bundles of these perks include the British Virgin Islands, Delaware, Panama, Seychelles and London.⁵ All these jurisdictions have been at the centre of various scandals related to their secrecy regimes (Konovalova et al., 2022; Palan et al., 2013; Robertson, 2021). Yet, they also strive to carve out markets for their corporate registries through the other perks mentioned above.

The second category consists of state-initiated incorporation platforms. Although countries such as Azerbaijan, Lithuania and Portugal have also established online incorporation systems (interviews 6, 16, and 30; Ministry of Finance, 2021), the Estonian e-residency is internationally the best-known example. It was established in late 2014 as a governmental “start-up” that aimed to enable foreigners to access the Estonian digital infrastructure (interview 15). Its bedrock is the Estonian e-State, which relies on a digital ID infrastructure and a unique ecosystem for exchanging information between public and private registries, both of which are actively marketed abroad as part of the national communication strategy (Budnitsky, 2022; Drechsler, 2018; Tammppuu and Masso, 2018). A digital ID card enables e-residents to establish companies, submit financial reports and taxes, and use digital signatures, all remotely. Estonia boasts low share capital requirements – lowered to €0.01 in 2023 – and it only taxes profits withdrawn from a company.⁶ As of February 2021, approximately 90,000 e-residency permits had been granted to applicants from 174 countries, which had established more than 20,000 companies.⁷

While the dynamics behind private-sector-driven and State-initiated systems differ, they also have significant similarities. As one of the founders of the e-residency programme noted,

⁵ Based on information available from <https://1office.co/company-formation-portal-uk> (accessed 14 March 2022); www.firstbase.io/start (accessed 27 April 2022); and <https://korporatio.com> (accessed 27 April 2022).

⁶ “Share capital requirement to be removed 2023”, 25 April 2022, <https://unicount.eu>.

⁷ Based on “E-residency in numbers”, www.e-resident.gov.ee/dashboard (accessed 14 March 2022). The figure includes issued permits but excludes those that are no longer in force. In 2020, more than 20,000 e-residents had apparently failed to pick up their permit or had not renewed them, which lowers the total number (Pau, 2020).

You are familiar with the concept what Delaware offers to the Fortune 500 companies, right? [...] Wyoming wants to do the same basically to everybody, so that small and medium enterprises can become virtual. [...] So, it's the same concept what we have been doing with e-residency, but given that it happens in the US, it is way bigger than our pioneering [e-residency programme] here in Estonia (interview 23).

In addition to such similarities, which strengthen the generalizability of our analysis, one further reason why Estonian e-residency provides an interesting case study is that the information exchange between authorities works more smoothly there than in most jurisdictions (OECD, 2017). The Estonian tax authority is also highly digitalized (Lember et al., 2018). Hence, Estonian concerns about supervising foreign entrepreneurs likely exist in other countries that offer similar online company registration and management services, allowing us to highlight research gaps in the literature (Yin, 2003). While the State-centered approach of Estonian e-residency differs from its private-sector-driven competitors, there are also overlaps between their two clienteles (interviews 15 and 23). In the following three sections, we document challenges encountered by Estonian authorities through three issue areas: the unexpected negative spillover effects in national supervision, the difficulties of supervising firms with no taxable income and the challenges in exchanging various kinds of information between authorities.

5. The unexpected negative spillover effects in national supervision

Policy challenges arise when countries develop their domestic economies by attracting foreign-based entrepreneurs while trying to achieve possibly conflicting policy goals. A former Finnish civil servant who followed Estonian governance closely at the time when the e-residency programme was developed notes how the programme was “developed by only a handful of people, after which it was soon initiated. Little by little, administrative problems started to emerge”, as other government agencies had not been properly consulted in the design of the programme (interview 11). As a former Estonian civil servant notes, “The key question is balance, how to motivate e-residents to invest to Estonia and at the same time to get the taxes” (interview 17). Maintaining such a balance can be tricky because of negative spillover effects. As noted earlier, Baker and Murphy (2019) suggest that such effects should be examined with qualitative country assessments on the role of different tax classes and administrative practices in international spillover effects of national tax systems. Yet, they provide little guidance on where to look for such administrative hindrances, what they might look like and how they ought to be studied. This section starts unpacking this puzzle by documenting how administrative difficulties have generated tax spillovers in Estonia.

When an entrepreneur wants to establish a company using e-residency, the first layer of control involves identifying the applicant. The e-residency team manages applications under the government agency Enterprise Estonia, but background checks are conducted by the Police and Border Guard (PBG) in cooperation with the tax authority. Depending on the home country, a successful applicant can obtain a digital ID card from an Estonian embassy or a visa consultancy firm (Ministry of Interior 2021; interview 16). As a civil servant (interview 21) explained, setting up a business is straightforward after obtaining an ID card. This interviewee noted that staff sometimes educate foreign “colleagues how you can set up a company in five minutes, and I log into the commercial register, and they just can’t believe you can do this”.

Although the claim of five minutes is somewhat exaggerated, the comment points to an important administrative problem: establishing companies online is highly streamlined, but monitoring them is cumbersome. After the e-residency programme started, several authorities – from the tax administration to the Financial Intelligence Unit (FIU) and the PBG – faced new and unanticipated tasks. Monitoring e-residents requires cross-governmental cooperation, but conducting background checks has been demanding both within Estonia and internationally (interviews 4 and 18). In Estonia, the PBG started receiving information on whether the Tax and Customs Board had reviewed applications only in 2018. Prospective e-residents were able to avoid any background checks by submitting their application as “a fan of Estonia”. This deficiency surfaced only in 2020 in an audit by the National Audit Office (NAO). The audit report also noted how e-residency permits had been granted to entrepreneurs who had bans on business operations abroad (NAO, 2020).

The PBG gained automatic access to the Estonian criminal register only in 2019. Earlier, it had to conduct cumbersome manual inquiries of the register. A shortage of skilled labour, failed recruitment processes and staff turnover hampered cooperation between agencies. The NAO (2020) noted that the PBG managed to control the eligibility of less than 3 per cent of the e-residents over five years (2014–2019). Another issue was that an applicant might have a clean criminal record when applying for an e-residency but that later misdemeanors abroad might go undetected (interview 21). The Estonian Government has addressed some of these gaps, e.g. by starting to demand more detailed information from applicants (interviews 4 and 20; *The Baltic Times*, 2021). Yet, the situation remains far from ideal. For example, it can be difficult to monitor foreign entrepreneurs whose names match those of other people (in this context, entrepreneurs who have many namesakes). As a former Estonian civil servant notes, “you don’t know the language, you don’t know the culture, it is really hard for a police officer to do background checks on some person [...] who has perhaps fifteen namesakes. Then it is really hard to find the reliable information” (interview 18).

The proliferation of digital identities can also enable entrepreneurs to switch IDs when registering for different services, jeopardizing supervision (Alev, 2020; Asari, 2020). As more countries start to offer various digital identities, the higher the chances that one of these systems enables people with malicious intentions or backgrounds to leverage their digital identity to access services in other countries. Even if administrative capacity and adequate IT systems are in place, legal reasons can make effective exchange of information between national authorities impossible (see next section).

The challenges that have hampered e-residency underline how limited administrative capabilities can obstruct effective monitoring even in countries ranking high in international digitalization comparisons. Such challenges in exchanging information are markedly different from the difficulties documented in the literature on global tax information exchange. The challenges we encountered concern either administrative issues within one country (i.e. Estonia), undetected changes over time in relevant background information, or lack of access to relevant background information. These are not the kinds of data points that have been in the focus of the literature on tax information exchange. The opportunity for fixing such loopholes through international treaties or organizations is limited. Rather, the countries that maintain such non-resident company registration systems need to ensure that relevant technical and administrative capabilities are in place.

6. Difficulties in supervising firms without taxable income

When corporate transparency has been discussed in the global tax governance agenda, it has typically been done through the country-by-country reporting initiative or some of its sector-specific applications (Garcia-Bernardo et al., 2021; Murphy, 2016; Seabrooke and Wigan, 2016; Stausholm et al., 2022). Country-by-country reporting obliges multinational enterprises to make detailed country-level financial data available in an easily readable form either for authorities or for the public. Yet, even its most ambitious proposals focus on expanding the publicity of financial information of large multinationals, leaving smaller companies aside. A separate policy debate has been waged on expanding beneficial ownership registers, which list persons who ultimately own, benefit from or control a company or an arrangement – directly or indirectly (van der Merve, 2020). Beneficial ownership registers would be useful for monitoring companies managed through online incorporation platforms, but even they would not alleviate many of the problems discussed here.

Tax authorities obtain information on companies and their owners from financial reports and tax declarations. Mismatches between countries of registration, ownership, management and operations can turn these documents into unreliable

sources of information (interview 20). In early 2021, about one-third of e-residents' companies were liable for value added tax and less than 4 per cent declared that they had employees. Only about 15 per cent had paid taxes to Estonia.⁸ Consequently, the Tax and Customs Board has lacked information about businesses operated by e-residents, including whether they pay taxes in the right jurisdiction or at all. Authorities rely on financial reports that often are submitted late or lack information. Sanctions for late or incomplete submissions are rarely imposed (interview 21).

These policy concerns differ markedly from those concerning the publicity of financial data of multinational enterprises. All major multinationals maintain meticulous records of the financial performance of their group companies, even if they are registered in secretive jurisdictions and hence kept out of the public domain. In the case of e-residents, a key problem is that this accounting data is not populated in the first place, because of mismatches between the locations of entrepreneurs and their companies.

In principle, Estonian financial service providers constitute another layer of control that would ideally weed out entrepreneurs and companies with questionable backgrounds or intentions. Yet, in some respects, this layer is only as strong as its weakest links. One service provider working for a well-established intermediary company criticized the ease of getting listed as a service provider on the Government's e-residency website, which brings a certain stamp of credibility. As this service provider notes, "I'm not sure if everyone [at the service provider marketplace] is okay, there are a lot of small hustlers" (interview 6). This interviewee also sees the inability or unwillingness of many entrepreneurs to pay for services as part of the problem:

The whole concept of do-it-yourself is bringing in a lot of people who are very aggressive towards service providers. They are very critical about the fees that service providers ask, they are looking to get everything for free. It means that in terms of business, you also get a lot of nasty people. They are looking to do their business for free, mostly they are micro-entrepreneurs who are not used to pay for anything and they expect everything to be free just like internet is for free. (interview 6)

Interviewees also criticized the lack of reporting requirements for providers of e-residency-related services (interviews 4 and 6). The ability to swiftly form companies online – another attempt to support overall economic development and to boost nation branding – obstructs effective monitoring (interview 4).

⁸ Email from a representative of the Estonian Ministry of Finance, 8 April 2021.

Tax authorities in Estonia and abroad have responded to the issues generated by cross-border economic activities, for example, by algorithmic screening methods (using artificial intelligence) that look for red flags of suspicious transactions and business models (interview 20). Yet, such benefits may evaporate when numerous small firms enter a relatively small country with limited or no information available on firm activities. Novel algorithmic methods can help in screening transactions, but they cannot replace the investigative work needed for investigating suspicious cases, with resourcing that is typically matched with the size of the country's economy, instead of unpredicted influxes of foreign entrepreneurs.

The insufficient access to relevant financial information documented earlier relates to mismatches between places of residence and places of economic activities. Such mismatches result in situations in which the effective transparency requirements are watered down when the legal home of a company differs from the places where it is liable for value added tax or has employee responsibilities. These mismatches could be addressed by establishing new national or international standards for reporting and effective enforcement mechanisms.

7. Gaps in the international exchange of information

In the early 2010s, advances in the automatic exchange of tax information expanded opportunities for obtaining information on foreign investment (Ahrens and Bothner, 2020; Hakelberg, 2015; Lesage et al., 2020). Automatic exchange of tax information means that tax authorities exchange information on financial investments automatically, without having to resort to cumbersome cross-border information requests.

While expanding automatic information exchange has been a genuine advancement in global tax governance, it has involved loopholes related to sometimes high reporting thresholds and financial items that are excluded from reporting. Knobel and Meinzer (2014) point out for example that real estate and other asset classes remain excluded, and that although more than 100 countries have committed to the automatic exchange of tax information, the United States remains uncommitted. The collective impact of these loopholes and gaps in the exchange of information on economic and tax data generate manifold opportunities for tax avoidance. Researchers have also noted that the wealthy may use "golden visas", anonymous trusts and shell companies to circumvent reporting rules. As Ahrens et al. (2022, p. 652) point out, "a Maltese bank, for instance, may no longer feel obliged to report the account of an Italian citizen if she can document tax residence in Malta despite not having her center of vital interests there".

Yet the policy-level focus on automatic exchange of tax information may also lead us to miss other aspects of economic data that currently do not cross borders,

even though they would be relevant for effective tax collection. Such gaps have received scant attention in the literature. For example, relevant officials may lack information on when a citizen of country X establishes a company abroad, even if said officials have a legitimate interest in such information (interviews 7 and 8). The challenges associated with the e-residency programme illustrate such difficulties, as mirrored in the NAO (2020) audit and a subsequent report from the Estonian Ministry of Finance (2021). Obtaining information on e-residents from countries with which Estonia has insufficient administrative cooperation has been particularly challenging, according to the Ministry's report.

Information on bans of business operations has not typically crossed borders and has largely remained outside relevant academic debates. The ensuing problems can be illustrated by one of the best-functioning bilateral information exchange systems in the world, between Finland and Estonia. These two countries have agreed to exchange relevant registry-related information automatically, including information on bans on business operations. A joint declaration by the prime ministers for exchanging such data was signed in 2016, but IT issues significantly slowed its implementation. In 2021, the scope expanded to cover information on many other items, such as value added and labour taxes. It effectively took five years to establish this internationally unique system (NAO 2020), which highlights the importance of tackling national administrative and resourcing challenges to exchange information. Moreover, even this system is not comprehensive. As an example, a Finnish civil servant notes, "We lack a mechanism that would notify the Finnish tax administration when a Finnish person takes a position of responsibility in an Estonian firm" (interviewee 8).

The European Union has recently begun to demand better information exchange on disqualified company directors (Council of the European Union, 2019; interview 20). Yet, the IT problems in two highly digitalized countries such as Finland and Estonia suggest that similar problems are likely to emerge elsewhere as well. Another issue is whether applicants have criminal records abroad. In principle, the PBG can make inquiries about offenses in public databases and international criminal record databases.⁹ Yet, convictions related to economic crimes are often excluded from such databases, which points to yet another deficiency in international information exchange (NAO, 2020). Finally, as the OECD (2017, p. 13) notes, "There appear to be barriers to the ability of tax administrations to share information with the police or public prosecutor in non-tax investigations". International criminal records are accessible in criminal proceedings but inaccessible when granting e-residency permits (Ministry of Finance, 2021). FIUs exchange data mutually on the assumption that such data will be used only in criminal proceedings. Asking for such permission from a foreign FIU would be unusual.

⁹ See, for example, Interpol databases (www.interpol.int/How-we-work/Databases).

As an Estonian civil servant (interview 4) explains, they gather information and analyse it “in administrative procedures, and the background checks also takes place in administrative procedures. We have information that could be used in criminal intelligence, but we can’t share it... It is a very complicated legal issue, how to spread intelligence among investigative authorities”. This difficulty boils down not only to different organizational mandates of key agencies such as the FIU and the tax administration, but also to differences in proceedings that take place under administrative and criminal procedures. Such differences can make effective information exchange impossible. Other such items could be found with similar case studies, highlighting the potential scope of expanding both policy and academic debates on the international exchange of tax information.

The veracity of such risks can be further exemplified by pointing to the recent inflow of cryptocurrency firms in Estonia. The growth of the cryptocurrency industry began in 2016, when Estonia introduced a licensing system for crypto businesses. The threshold for conducting know-your-customer checks in crypto trades was set to €15,000. Any trades that remained under this threshold were essentially anonymous. The perks of e-residency provoked a rapid inflow of foreign crypto entrepreneurs to Estonia. At its peak (2019), some 1,300 licensed cryptocurrency service companies were registered in Estonia (FIU, 2022). The number of active firms has since collapsed to fewer than 400 as a result of stricter reporting rules and other new regulations. Yet, according to the FIU, over half of global cryptocurrency service providers were still registered in Estonia in mid-2021 (FIU, 2022).

8. Discussion: Overcoming the “concept-measurement” gap

Our case study has demonstrated that although policy relevance is often encouraged and important in research, we should also be open-minded about tacit policy concerns that have not yet emerged as major policy issues but that carry such potential. Online incorporation platforms and their governance constitute one such phenomenon. Understanding their operational logic highlights the novel ways in which national and international governance challenges get intertwined, generating failures in governing global business. In this section, we address such dynamics by discussing the nascent “concept-measurement gap” approach in the context of our analysis of administrative tax spillovers.

Recent years have seen important analytical openings on the deteriorating quality of economic statistics and the increasing rift between statistical artefacts and the theoretical concepts that we attach to them (Linsi and Mügge, 2019; Mügge and Linsi, 2021). Statistical categories are essentially Weberian (2012) ideal types that provide models for the scrutiny and systematic characterization of concrete situations. It has been claimed that to remain relevant, ideal types should be seen

as models to be developed as new empirical evidence comes along (Parker, 2013; Seabrooke and Wigan, 2022). Such reforms have been rare in the realm of economic statistics. The resulting concept-measurement gaps (Mügge and Linsi, 2021) have been mostly discussed in the context of the macroeconomic data that statisticians process. The key initiators of this approach, Mügge and Linsi (2021, p. 411) note how “massive increases in the volume and complexity of international economic transactions have multiplied the probability that a transaction will escape the nets of statistical measurement, or that it will be misattributed in the national accounts”.

The firm-specific foundations of such misattributions have recently received some attention (Babic et al., 2020; Ergen et al., 2023; Schwartz, 2022) in the context of large multinational firms. We argue that the debate can be further improved by examining the micro-foundations of the concept-measurement gap against the three observations by Baker and Murphy (2019, p. 182), who argue that “tax spillovers occur both within and between jurisdictions; tax spillovers exist between different taxes; [and] tax spillovers can be created by administrative disorder and regulatory arrangements”. These observations – especially the last one – point to the problems that public administrators face when collecting economic data.

As summarized in table 1, we have analysed such problems with the three-fold categorization of the unexpected spillover effects in the national supervision of e-residents, ensuing difficulties in supervising firms without taxable income and gaps in the international exchange of information. Each step of our analysis has pointed to complex administrative issues that have both generated concept-measurement gaps in assessing the economic activities of mobile entrepreneurs and carried real risks of significant tax spillovers. The ensuing tax spillovers and concept-measurement gaps are related neither to the work of statisticians nor to the activities of large multinational enterprises. Rather, they point to the importance of tackling the role of online incorporation systems and the ensuing spillover effects in the world economy.

Broadening the analyses of online incorporation systems and their spillover effects encourages developing closer cooperation between IB, global tax governance scholarship and research from a related perspective in public administration and policy (Moloney and Stone, 2019). The need for such trans-disciplinarity is highlighted by the situation in which the advances in tackling tax evasion and money laundering have often constrained the effective national capacity to supervise foreign entrepreneurs (interviews 4, 7, 8, 18, 20 and 21). We argue that the importance of addressing such deficiencies grows with the international proliferation of both State-driven (interviews 6, 16 and 30) and private-sector driven (e.g. Wyoming; also interview 23) online incorporation systems. The more important a jurisdiction becomes for such incorporations, the more crucial it is to nurture well-functioning and appropriately resourced national supervisory systems and associated mechanisms of international cooperation.

Table 1. Key takeaways by category of effect

Effects	Characteristics
Unexpected negative spillover effects of national tax systems	Difficulties in conducting background checks for applicants of online incorporation systems
	Administrative bottlenecks in exchanging information between agencies across borders
	Mismatches between the ease with which companies can be created in online incorporation systems and adjustments in administrative capacities to monitor these firms
Difficulties in supervising firms without taxable income	Mismatches between countries of registration, ownership, management and operations that make financial reports and tax declarations unreliable sources of information for authorities
	Risks related to effectively outsourcing supervisory responsibilities to business service providers
Gaps in international exchange of information	Limitations of automatic information exchange on bans of business operation, corporate registrations, and tax items such as value added and labour taxes
	Difficulties in sharing information between administrative and criminal procedures

Source: Authors' elaboration.

9. Concluding remarks and policy implications

This paper has pointed to an important area for further research and policy work for interdisciplinary scholarship on global tax governance by delving into the governance challenges created by online incorporation systems. We have demonstrated that while the OECD's efforts to expand the international exchange of tax information are laudable, de facto national capabilities to benefit from them vary greatly within and between countries. If the lack of such capacity has been an issue for a well-functioning country like Estonia, other countries that attract or aim to attract large amounts of foreign small-scale entrepreneurs are likely affected as well. Given the allure of the economic benefits – such as registration fees or even some real economic activities – brought by foreign entrepreneurs, tackling the administrative challenges discussed here is of great urgency. Although most of the businesses that use online incorporation services are small, their collective impact can be significant.

Several policy changes could be executed in the national, regional and global spheres of governance. Starting with the first category, the NAO (2020) has suggested that permissions to establish and manage companies abroad should be granted only to individuals from countries with which the registrant country has well-functioning administrative cooperation and information exchange. Applying this proposal would also benefit the governance of foreign-owned small firms in places such as Wyoming or London. Moreover, the NAO points out that the burden of proof of a clean criminal record and permission to conduct business could be with the entrepreneur, even if individuals may sometimes attempt to counterfeit these documents.

One counterargument to such proposals is that these steps could undermine efforts targeted at attracting foreign entrepreneurs. As the evidence shows, solving this policy conflict assumes targeted investments into administrative capabilities ranging from skilled personnel to data exchange and interorganizational coordination. The question remains if the expected benefits in one policy area would outweigh the investment needed and potential indirect setbacks, such as reputation loss, in another policy area.

Finally, the exchange of information on bans on business operations and other relevant items of economic data needs to be expanded regionally (e.g. within the European Union) as well as internationally. International organizations also need to overcome the difficulties in exchanging information between administrative and criminal procedures, which currently hamper the use of information on criminal records related to economic crime. Mapping the full range of such difficulties should be supported by incorporating such efforts into the country reviews of organizations such as the Financial Action Task Force, the OECD and the International Monetary Fund. A growth in the ratio of foreign-based entrepreneurs and national administrative resources should be reflected in such reviews, and it could be incorporated in tax spillover analyses.

The challenges and policy proposals discussed here have different implications for countries in the global North and South. It is generally easier for the highly developed OECD countries to mitigate the effects of tax spillovers in general, not to mention emerging themes such as online company registration platforms. Hence, addressing the international administrative bottlenecks and secrecy structures that enable ensuing tax spillovers is also very much a development policy issue. The negative development impacts could be addressed by both stronger international transparency and administrative cooperation, as well as in tax-related technical assistance programs.

Further research could examine the administrative capacities of countries that have established, or plan to establish, similar programmes. Such analyses could be complemented with interviews of entrepreneurs and service providers in these countries. More research would also be needed on how key international organizations (such as the Financial Action Task Force) could alleviate issues related to, for example, sharing of information between FIUs and other regulators, and the difficulties in sharing information between administrative and criminal procedures.

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Annex table. Interviewees

Interview number	Interviewee position	Date
1	Service provider, non-recorded background interviews	9 July 2018 6 October 2020
2	Finnish civil servant, non-recorded background interview	10 September 2020
3	Finnish civil servant, non-recorded background interview	23 September 2020
4	Estonian civil servant	9 October 2020
5	Estonian civil servant	22 October 2020
6	Service provider	10 November 2020
7	Finnish civil servant	18 November 2020
8	Finnish civil servant, joint interview with Interview 7	18 November 2020
9	Service provider	16 November 2020
10	Entrepreneur, non-recorded background interview	25 November 2020
11	Former Finnish civil servant	27 November 2020
12	Entrepreneur	10 February 2021
13	Service provider	12 February 2021
14	Entrepreneur	19 February 2021
15	Estonian civil servant	3 March 2021
16	Former Estonian civil servant, entrepreneur	5 March 2021
17	Former Estonian civil servant	8 March 2021
18	Former Estonian civil servant	9 March 2021
19	Entrepreneur	1 March 2021
20	Estonian civil servant	5 April 2021
21	Estonian civil servant	8 April 2021
22	Entrepreneur	22 April 2021
23	Former chief executive officer of the e-residency team	4 May 2021
24	Service provider	6 May 2021
25	Entrepreneur	20 September 2021
26	Researcher and e-resident	21 September 2021
27	Entrepreneur	4 October 2021
28	Entrepreneur	6 October 2021
29	Entrepreneur	7 October 2021
30	Former department head in the Ministry of Interior	11 October 2021

Source: Authors' compilation.