# Neobanks' Footprint on the Transformative Path of the Austrian and the Slovenian Banking Market

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## **Abstract**

The digital transformation in banking, which is supported by the European regulatory framework, has enabled new business models for banking. One example of these changes is the emergence of neobanks. We examine the presence of neobanks in two national markets, Austria and Slovenia. Despite the geographical proximity and rich history of banking integration between the two markets, our findings reveal significant differences in this perspective between the two markets. In the analytical part, we use available indirect and descriptive data. We have identified two historical periods. In the first, domestic neobanks appeared. Unlike in Austria, where there is a rich history of domestic neobanks, there were none in Slovenia. In the second identified period, the most propulsive European neobanks are similarly active in both markets, which increases competition in the banking markets. In the future, the neobanks could contribute to the increase in the mobility of deposits outside the national banking markets.

## Introduction

European citizens mostly keep their deposits in domestic banks. However, a small part is being held in bank accounts abroad, especially in other EU member states. There are two factors which importantly foster the ability to move deposits more easily: digital transformation of the banking industry and the European legislation supporting cross-border banking. Increased mobility of savers and credit seekers will be a relevant topic for the competitiveness of domestic banking markets in the next years. It is also relevant for banking supervision, especially in small European banking markets, when safeguarding financial stability is considered.

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Although the proportion of deposits kept in bank accounts abroad is still small, it can be expected to grow strongly and hence it can be a potential source of volatility in financing sources for banks, affecting the stability of deposits. One of the rare empirical pieces of evidence on this topic shows that for Dutch households this proportion has recently doubled to 2.4% of Dutch savings in bank deposits. Traditionally, Dutch households deposited the largest volumes in German banks, but as a result of the increase in interest rates, the volume of deposits in Estonia and Italy has increased significantly (De Nederlandsche Bank, 2024). Slovenian tax residents had almost 2.8 billion EUR deposited in foreign bank accounts globally by the end of 2022, mainly, 36.4 %, in Austrian banks (Finančna uprava Republike Slovenije, 2024b). However, some non-deposit bank exposures might be included in that data. In the Slovenian banking sector households held about 26.5 billion EUR deposits by the end of 2023, which is half of the balance sheet total of Slovenian banks and therefore their most important source of financing (Banka Slovenije, 2024b). According to these data, it appears that Slovenian households might be holding a much larger share in accounts abroad as compared to Dutch households.

The public accessibility of the internet in the 1990s was a major force enabling the emergence of neobanks and finally increased their importance. Previously, only a few banks operated in the sense of »banks without physical branches« and communicated with their customers via postal services and telephone (Guettler & Hackethal, 2005).

Today, neobanks are digital-only banks with a banking licence that operate exclusively online without physical branch locations. These financial institutions typically provide banking services and products through digital channels, like mobile apps and websites, and include a wide range of services like savings accounts, payment processing, loans and investment opportunities. They usually offer innovative features, fast account opening processes and are known for their customer-centricity, the integration of advanced technology and their adaptability to changing customer needs. They obtain data and feedback from their customers that can enable them to improve services by tailoring them to consumers' needs (BBVA Research, 2016; Citterio et al., 2024;

El-Gohary et al., 2021; Jagrič et al., 2021; Temelkov, 2020b; Ziouache & Bouteraa, 2023).

In today's markets there are two types of digital-only banks. Those of the first type that have taken comprehensive measures by fully exploiting the opportunities offered by digitalisation, reaching out to customers exclusively digitally and so entirely bypassing the concept of branches, thereby saving ongoing costs. These technology-enabled entrants are typically newly established, mostly fall under the category of less significant institutions or are long-existing but have recently radically changed to a digitally-focused business model. The second group consists of traditional banks responding to the challenges posed by the first type, the new digital entrants, by establishing new digital-only subsidiaries with different names and branding, in addition to their previous digital channels (European Central Bank, 2020).

While typically traditional small banks (less-significant institutions, LSIs) operate nationally, digital-only LSIs operate internationally, at least in European markets, due to passporting<sup>1</sup>. The range of business areas is different to traditional banks, as digital-only competitors tend to specialise in certain business lines, like payment systems, trading and asset management (European Central Bank, 2020).

We examine how traditional banks in two national markets are challenged by the new neobank market entrants. The paper explores a global and a more narrow research question. Results bring novel arguments regarding the area of financial innovations, thus strengthening the ability for managerial and supervisory decision-making in times when traditional banking has arrived at crossroads.

The paper is structured as follows. In section 2 we formulate two research questions and provide an overview of the current market structure in Slovenia and Austria. In section 3, we analyse the role of neobanks in the banking market based on their business model characteristics. In section 4 we compare the evolution of neobanks in the two selected markets, Austria and Slovenia. Finally, we present our conclusions in section 5.

without needing additional authorization, significantly simplifying cross-border operations (see e.g. https://www.eba.europa.eu/regulation-and-policy/passporting-and-supervision-branches, accessed 30 October 2024).

<sup>&</sup>lt;sup>1</sup> Passporting allows banks and financial institutions in the European Economic Area (EEA) to operate across member states with a single regulatory license obtained in their home country. With passporting rights, a bank licensed in one EEA country can offer its services in others

# Methodological Approach and Data on the Market Structure in Slovenia and Austria

Our primary research question refers to the investigation of "whether neobanks act as an accelerator of the digital transformation of the banking industry as a whole". We address the impact of the fintech industry in this regard and explore the role of neobanks in the banking market. We use qualitative research methods, description and compilation methods, and subsequently analysis and synthesis.

After exploring the first research question in global terms, we proceed to our second and narrower, nationally oriented research question. Technologyenabled innovations in banking, new business models and new financial services could have a different impact on the market development in small markets as compared to large and mature banking markets. We explore the question "how common are characteristics of the banking markets in the neighbouring euro area countries, Austria and Slovenia, in respect to the neobanks' presence and role played on the market". We comparatively explore the market segment for digital-only or close-todigital-only new market entrants. We look for common characteristics and important differences between the two national markets. Important facts to consider are that some market players are active in both markets (e.g. N26, Revolut, TradeRepublic) and that both countries are within the banking union and the banking supervision under the Single Supervisory Mechanism (SSM) and are subordinate to the European regulatory framework (but with national options making a difference). Therefore, the comparison will be twofold, with a market-entity aspect, that takes into account the market characteristics that enable profitable business operations, and, secondly, a financial stability aspect, where we explore the interplay of determinants supporting banking market integration in the CEE region as part of the euro area.

The Slovenian banking market is rather small and has experienced a trend of market consolidation. By the end of 2006, there were 20 banks and three savings banks with their headquarters in Slovenia and two branches of EU member state banks (Banka Slovenije, 2007). The number of credit institutions had been declining, decreasing to ten banks, three savings banks and two branches of member state banks by the end of 2023, when the sector's total assets amounted to EUR 53.1 billion, 81.1% of the Slovenian GDP (Banka Slovenije, 2024a). There is a large number of credit institutions and payment institutions of member states who may operate directly from outside Slovenia. Alone in 2023 there were

66 notifications of direct provisions of services by banks, notifications of cross-border services, provisions of consumer credit intermediation services for real estate, provisions of payment services, and provisions of electronic money issuance and payment services (Banka Slovenije, 2024a). Another important feature of the Slovenian banking market is a large share of non-bank deposits, amounting to EUR 41.1 billion or 77.4% of the banking system's total assets. Household deposits are currently a stable source of funding for the banking system. (Banka Slovenije, 2024b).

Fintechs have a very prominent presence in the area of payment services, and also in asset management, crypto-assets, insurance, savings products (accepting deposits), and lending services. In the area of payment services as well as in other areas, the Bank of Slovenia is active in the role of a controller, supervisor and catalyst through various instruments (Banka Slovenije, 2021). Under the Bank of Slovenia, the National Payments Council operates, where the stakeholders in payment services coordinate interests, define priorities and give ideas on measures to improve the situation, to support a balanced and sustainable development of the payment services market in Slovenia, ensuring an adaptation to changes in an international environment (Banka Slovenije, 2021).

Further, according to the governor of the Bank of Slovenia, technological changes facilitate the entry of new providers into the financial market. They introduce new approaches to business and transform traditional ways of doing business, especially when existing entities are not fast enough in implementing changes (Vasle, 2024). However, although Slovenian traditional banks have not established any digital-only banks as subsidiaries, they are on a path of digital transformation and interact with fintechs. NLB d.d. and its venture team eNLaB look for new and better ways of solving customers' financial needs by building business cooperations with ambitious fintechs (NLB d.d., 2024). Slovenian (traditional) banks are characterised by a volume of business activities that remains relatively small and their business models and the development of the services remain insufficiently addressed (Vasle, 2024).

In the 1990s, several direct banks were established in Austria that specialised in securities trading and custody. In the context of the market euphoria during the dotcom bubble in the late nineties, equity market investments became popular among broad sections of the population. For the business model of Austrian direct banks in the 1990s, a special procedure, an Austrian variant of a

single remote identity verification system, was very important. It made it possible to open an account by post. It enabled to offer securities custody accounts in Germany and Austria.

In this study, we use data from reports and statistical databases of the European Central Bank, De Nederlandsche Bank, Banka Slovenije, Finančna uprava Republike Slovenije, annual reports and web pages of individual banks and fintechs. However, national (publicly available) banking statistics do not reveal the volume of activities that foreign banks have in other national markets, operating cross-border. Also, a differentiation according to the business model is not publicly available. Therefore, to estimate the market presence of digital-only banks, we had to employ indirect data.

# Novel and Technology-Dominated Banking Business Models

As access to technology has become widespread, technology has transformed almost every sector and changed everyday life. As a result, people and technology are increasingly, even inextricably intertwined. Disruptive technologies such as artificial intelligence also play an increasing role in banks' operations. Consequently, banks are more dependent on data, IT platforms and third-party services, like apps or cloud-based services (McCaul, 2024b) and are thus more vulnerable.

The main differences between traditional banking models and neobanks lie in various aspects such as their operational structure, customer interaction, and use of technology (Temelkov, 2020a, 2020b). While traditional banks have physical branch locations, neobanks operate online without physical restrictions. Customers can access neobanks from anywhere while traditional banks have fixed working hours for customer service. In this way, neobanks offer immediate customer service, while the speed of service of traditional banks depends on the knowledge and skills of the employees. However, when traditional banks integrate mobile apps with 24/7 support, the office opening times of branches do no longer make a difference.

Clerc et al. (2020) define four generations of neobanks:

 Online offerings: initially focusing on niche market segments (e.g. Fortuneo in 2000, Boursorama in 2002, ING Direct in 2000), they later offered low prices for basic banking services and allowed customers to access a range of financial services that were not typical for traditional banks. They are characterised by two types of strategies: (i) distribution channel of a classic bank services (e.g. Hello Bank!, a brand of BNP Paribas), or (ii) an independent bank.

- Distributor banks ("phygital"): To improve the group's profitability by diversifying revenues, they are expanding the group's activities to the banking services of otherwise non-banking groups (e.g. C'Zam for Carrefour before 2020, AXA Bank), They use non-banks' core business networks to acquire customers by, e.g., financing purchases of the non-banks' products.
- "Mobile pure play" neobanks: are characterized by a "freemium" business model (free basic services), while further services have to be paid. The use of state-of-the-art IT technology also allows them to build and exploit extensive databases (e.g. N26 and Revolut).
- "Ready to use" or "modular" banks: they were initially operating as "Payment as a service" (PaaS) and later developed the "Bank as a service (BaaS)" model. They do not necessarily hold a banking licence, but they may offer services related to payments by interacting with another entity that does have a licence. The business model can be considered a B2B2C (business to business to client) model.

Today, technology-dominated business models are the most prominent. The elusiveness of the definition of neobanks stems from the blurred boundaries between banks and non-banks, which changes risks and poses a challenge also to regulation and supervision of different entities. Technology-oriented business models may underestimate sound bank risk management practices due to their focus on convenience, efficiency and growth (McCaul, 2024a).

The selected neobanks that operate in Austria and Slovenia have business activities in various business areas: Payments, Loan origination, Savings products and Securities trading.

There is a dominance of securities trading, Payment services and savings products are each offered often, which shows that while these are still core services, they are not equally prioritised by all neobanks. This suggests that many neobanks are cautious about entering the deposit business, as it entails higher regulatory and capital requirements.

Neobanks such as Revolut, ING-DiBa, and easybank stand out because they offer a comprehensive range of services. This divergence shows how neobanks are positioning themselves to meet specific customer needs – whether in retail banking or investment services.

# National Banking Landscape and Cross-Border Banking in Austria and Slovenia

# Technology-Oriented Financial Environment in Austria and Slovenia

There are no Slovenian neobanks or digital-only banks, neither as an independent bank headquartered in Slovenia nor as a subsidiary of a Slovenian bank. However, neobanks from other EU member states offer their banking services in the Slovenian market. The data on achieved volumes of activities is not disclosed by banks themselves and we could only indirectly estimate their market presence, combining several data sources. However, there are Slovenian fintechs without a banking licence who offer specialised financial services, e.g. LeanPay, Bitstamp, mBills, Paywiser, Toshl Finance, and VALÚ. Some were established in Slovenia or by Slovenian citizens. They followed different paths of development, and some are no longer headquartered in Slovenia. To enable their operations or to gain clients, some are partners of licensed Slovenian (and other) banks. They operate in e.g. payment services, consumer credit services or crypto assets trading.

- Leanpay is not a bank but a fintech founded in 2019 in the field of digital Point-of-sale Finance ("dPOSF") and Buy Now Pay Later ("BNPL"). It is a market leader and offers payments in instalments. The service is digital, available anytime and anywhere with no required credit card or other financial product onboarding (Leanpay d.o.o., 2024).
- Paywiser, established in 2017, is a Bank of Slovenia-licensed e-Money institution and passported throughout the EEA that offers multifunctional full-service payment solutions. It issues payment cards, electronic wallets and accepts payments. It has a global presence with 360 offices forming a financial network (Paywiser d.o.o., 2024).
- mBills is a non-bank fintech, a mobile wallet that came to life as an idea in 2013 in the Halcom

incubator. 2017 mBills went into a strategic partnership with Petrol. It provides users with various payment methods: transfers between users, online payments, payments of cashier bills, and since 2018 a partnership with Mastercard has existed (Petrol Pay d.o.o., 2024). It also enables consumer credit up to 5,000 EUR from Addiko bank (Addiko bank, 2024).

Several fintechs and neobank were established in Austria and are therefore domestic financial institutions (banks or non-banks). A prominent example is Bitpanda GmbH, founded in Vienna in 2014. It was subsequently the first Austrian start-up company with a valuation of more than one billion USD (Danzer, 2021). Originally, the focus of the offering was on trading cryptocurrencies, and it has expanded over the years to include trading in other securities and commodities. Bitpanda currently has more than 3 million customers, but the number of customers in Austria is not communicated.

#### **Austrian and Slovenian Neobanks**

The ECB reports that, as of mid-2019, four digital-only LSIs were authorized in Slovenia to operate cross-border through branches or passporting, while Austria saw the authorization of ten such institutions, including domestic digital-only LSIs. (European Central Bank, 2020). In response to our inquiry about the names of these banks, the ECB, on behalf of the authors of the ECB's Risk Report on LSIs, stated, "We are not authorized by the National Competent Authorities (NCAs), who owned the data, to disclose the names of the banks included in this analysis". While passporting grants banks the right to operate cross-border, it does not confirm that they actually do so or to what extent, which remains unverified for this research.

The history of established neobanks in Austria is rich and is presented in Table 1. The three neobanks Direktanlage Bank, Volksbank Direkt and Direktbank.at were founded in the 1990s and all pursued a similar business model with a focus on securities trading. These banks have in the meantime left the market or they operate as a brand of an established traditional bank. Easybank was founded in 1997 and developed into the most successful Austrian neobank before being integrated into BAWAG PSK in 2020. From today's perspective, Dadat Bank, launched in 2017 by the GRAWE Banking Group, represents the youngest establishment of a neobank in Austria.

Table 1 Domestic direct and digital-only banks in Austria

Name	Founded/ M&A		
	<ul> <li>1995 by the Salzburger Kredit- und</li> </ul>		
	Wechselbank		
Direktanlage Bank	<ul> <li>2001 acquired Volksbanks Direct</li> </ul>		
	<ul> <li>2002 acquired by German DAB Bank</li> </ul>		
Dalik	2014 acquired by BNP Paribas to be part		
	of their subsidiary Hello Bank!		
	<ul> <li>2021 sold to BAWAG</li> </ul>		
	<ul> <li>active since 1990 as an online platform</li> </ul>		
	of PRIVAT BANK AG		
Direktbank.at	<ul> <li>2007 established as an independent</li> </ul>		
	bank and 100% subsidiary of PRIVAT		
	BANK AG (itself a subsidiary of RLB OÖ $^2$		
	at the time)		
	<ul> <li>2015, the entire PRIVAT BANK Group</li> </ul>		
	was integrated into RLB OÖ		
	<ul> <li>1998 founded by Volksbank Vorarlberg,</li> </ul>		
Volksbank	addressing customers in Germany		
Direkt	<ul> <li>2001 entire customer portfolio was sold</li> </ul>		
	to Direktanlage Bank		
	began as a supplementary online service		
	for existing customers of BAWAG PSK		
	<ul> <li>in 1996 establishment as an independent bank and 100% subsidiary</li> </ul>		
easybank	of BAWAG PSK		
	<ul> <li>- 2017 acquired credit card business</li> </ul>		
	PayLife Bank GmbH,		
	<ul> <li>2018 expanded to Germany under the</li> </ul>		
	brand Qlick;		
	<ul> <li>2020, integrated into its parent company</li> <li>BAWAG PSK – today functions as a</li> </ul>		
	brand of the BAWAG Group.		
	<ul><li>founded in 2017 by Schelhammer</li></ul>		
Dadat Pank	Capital Bank AG as a direct bank;		
Dadat Bank	<ul> <li>today it is a subsidiary of the GRAWE</li> </ul>		
	Banking Group		

Source: Atzler, 2019; BAWAG, 2021; Braumann, 2018; Dadat Bank, 2024; Knauseder, 2019; Pressetext, 2020

# Foreign Neobanks Operating in Austria and Slovenia

Today, several large European neobanks such as N26, Trade Republic and Revolut are active in Austria. N26,

founded in 2013, has been offering services such as free current accounts, savings products, credit cards and securities trading in Austria since 2015. Trade Republic, founded in 2015, focuses on cost-effective trading in securities and cryptocurrencies, while Revolut, founded in London in 2015, offers current accounts and trading in securities and commodities in addition to foreign currency transactions.

However, these digital entrants were not the first ones without physical branches entering the market in Austria. BSV Bank, founded in Germany in 1965 as a bank without physical branches, initially communicated with its customers via postal services, later by telephone and finally introduced online banking.

In 1998, Dutch ING group acquired 49% and operated as DiBa and later as ING-DiBa (DiBa stands for 'Direktbank') as a direct banking subsidiary of ING Direct in the ING group. The bank experienced remarkable growth and offered its services (savings, loans, investment products and current accounts) via the internet, fax and telephone (Guettler & Hackethal, 2005).

In 2003, the ING group took over ING-DiBa in its entirety, and ING-DiBa in turn took over its largest direct bank competitor in Germany, Entrium Direct Bankers, which had been active in Austria already (Löding, 2003). In 2004, ING-DiBa Austria began its activities in Austria as a branch of the German ING-DiBa. At first, it only offered savings products. Loans and investment products were introduced in 2013 and current accounts in 2017 (Haas, 2021). Also in 2017, the bank was renamed ING Austria.

In 2021, the private customer business with around 100.000 customers was sold to bank99, a newly founded bank and 80% subsidiary of Austrian Post with a large number of branches (Handelsblatt, 2021; Österreichische Post, 2021). The remaining customer base of ING Austria consists only of wholesale customers. Accordingly, total assets fell from EUR 1,840 million in 2020 to EUR 261 million in 2022 and the number of employees declined from 332 to 17 (ING Group, 2023).

<sup>&</sup>lt;sup>2</sup> Raiffeisenlandesbank Oberösterreich AG (RLB OÖ)

**Table 3**Foreign neobanks and digital-only banks operating in Austria and Slovenia

	Country of registration/IBAN/Deposit	Indication of volume of business activity	
Name of the bank	scheme/Supervisory Authority / Performance specifics or regulatory issues	Austria	Slovenia
bunq	<ul> <li>Netherlands</li> <li>since 2018 banking licence for all European markets (EAA)</li> <li>for Slovenian and Austrian customers NL IBAN (local IBANs are possible for German, French, Irish, or Spanish customers)</li> <li>Dutch Deposit Guarantee Scheme (DGS), protected up to EUR 100.000,</li> <li>under supervision of De Nederlandsche Bank</li> <li>in 2022 became the first profitable EU neobank</li> </ul>	– N/A (no exact data available)	<ul> <li>N/A (no exact data available)</li> <li>probably small but stable activity</li> <li>all MFIs in the Netherlands (ESCB excluded) exposure on the deposit liabilities vis-a-vis households in Slovenia in 2024 Q2 only 8 mio EUR</li> </ul>
N26	<ul> <li>Germany,</li> <li>full German banking license since 2016, expand to Europe in 2019</li> <li>German DE IBAN</li> <li>funds protected up to EUR 100,000 by the German Deposit Protection Scheme</li> <li>under supervision of BaFin end of 2023, over 4.2 million income-related customers, primarily in Germany (50%) and France (25%)</li> <li>in June 2024, a restriction since 2021 by BaFin, on the maximum number of new customers per month was lifted</li> </ul>	N/A (the exact number of customers in Austria is not communicated)	<ul> <li>about 27,000 end-of-2022         bank accounts reported to the         tax authority by Slovenian tax         residents         assuming a similar reporting         rate as with Revolut accounts,         the number of bank accounts         could be over 75,000</li> </ul>
Revolut	<ul> <li>Lithuania</li> <li>since 2018 licensed by the European Central Bank</li> <li>Lithuanian LT IBAN</li> <li>funds protected up to EUR 100,000 by the Lithuanian Public Institution "Deposit and Investment Insurance"</li> <li>under supervision of the Bank of Lithuania</li> </ul>	- Revolut had 300,000 customers in Austria in February 2019, which corresponded to a market penetration of 3.7%	<ul> <li>data from international tax data exchange shows end-of-2022 about 137,000 bank accounts</li> <li>a smaller number was reported by tax residents themselves to the tax authority</li> <li>2023 (as of 30.9.) Revolut reports 116,000 customers,with 6 million card payments with an annual growth rate of 67%</li> </ul>

**Continuation of Table 3**Foreign neobanks and digital-only banks operating in Austria and Slovenia

	Country of registration/IBAN/Deposit	Indication of volume of business activity		
Name of the bank	scheme/Supervisory Authority / Performance specifics or regulatory issues	Austria	Slovenia	
Trade Republic Bank	<ul> <li>Germany</li> <li>full German banking license for EAA since December 2023</li> <li>German DE IBAN</li> <li>funds protected up to EUR 100,000 by the German Deposit Protection Scheme</li> <li>Under supervision of BaFin and Bundesbank</li> </ul>	<ul> <li>N/A</li> <li>Although capital gains tax (KESt) is not paid directly for Austrian customers, assistance is provided free of charge for the preparation of the tax return</li> </ul>	<ul> <li>the deposit liabilities vis-a-vis households in Slovenia of all microfinance institutions (MFIs) grew from 9 mio EUR in Q2 2021 to 64 million EUR in Q2 2024. Although here all banks are included, the popularity of Revolut in Slovenia might have importantly contributed to that figure</li> <li>Despite no data gathered, we can assume the popularity has grown since December 2023 according to numerous questions by Slovenian households</li> <li>The tax authority issued a public explanation on interest earned after 6.12.2023 is taxed with personal income tax as interest earned at bank</li> </ul>	
Klarna	<ul><li>Sweden</li><li>Swedish banking licence since 2017</li></ul>	<ul><li>used for online</li><li>purchases in 7,000</li></ul>	accounts (133. ZDoh-2)	
		stores  - no disclosure on the number of customers in Austria	No data that would suggest business activity	

Sources: bunq B.V., 2024; European Central Bank, 2024; Finančna uprava Republike Slovenije, 2024b, 2024a; Hunter, 2023; N26 Bank AG, 2024; Revolut Bank UAB, 2024a, 2024b; TradingView, 2024

## **Conclusions and Discussion**

The rapid development of technology and innovation has fundamentally changed the financial sector in recent years. In particular, the emergence of banks with a digital business model, referred to as neobanks, has challenged the traditional banking system and led to a paradigm shift. The literature uses broad terms for this group of financial institutions, and numerous variations of financial institutions can be included in this group. This heterogeneity also reflects the rapidly changing business models that these banks apply when trying to achieve competitive and efficient operations to ensure profitability and stability in their financial performance. Thus, in the frame of our first research question we found

that neobanks have used technology more radically than traditional banks and have thus forced traditional banks to strengthen their digital channels to stay competitive. Further, neobanks typically offer non-bank financial services more actively than traditional banks. However, digital business models are not just about digitalisation of distribution channels but are deviating from traditional banking, which may weaken their operational resilience or liquidity due to excessive risk taking. Neobanks may force the banking and financial industry to change, and they also introduce a new vulnerability that has to be managed.

The second research question revealed surprising insights. Despite increased mobility enabled through

digitalisation and passporting, there are notable differences in different markets such as Austria and Slovenia. Very different characteristics appear from the fact that in the Austrian market, there was a much larger number of neobanks present in the market and that there is a history of Austrian banks' subsidiaries acting as neobanks, while in Slovenia, none of the banks has established a bank, with a digital business model. Probably, the size of the market and the inability to scale up business volumes in Slovenia contribute to these differences. Even with passporting abilities, a lower number of foreign neobanks is active in the Slovenian market. A common feature to both national markets is the presence of the most prominent European neobanks, like Revolut, Trade Republic Bank and N26.

An important limitation of this research is the unavailability of precise data on the activity of individual banks in individual markets. Additional and precise data on market activity was provided upon our direct request to the analysed banks not disclosed, also wasn't disclosed by the contacted national banking authorities and is not available from publicly available sources. In this research indices give first insights into this field. The stakeholders in the banking business, market participants and the regulatory and supervisory bodies might be able to use in the future different kinds of disclosed data on business activity in digital-only business models and cross-border. All banks, not just the digital-only, will be able to use this potential for growth of their business activities with expanding in digital-only business forms.

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# Odtis neobank na poti transformacije avstrijskega in slovenskega bančnega trga

# Izvleček

Digitalna preobrazba v bančništvu, ki jo podpira evropski regulativni okvir, je omogočila nove poslovne modele za bančništvo. Primer takih sprememb je pojav neobank. Preučujemo prisotnost neobank na dveh nacionalnih trgih, v Avstriji in Sloveniji. Kljub geografski bližini in bogati zgodovini bančne integracije med obema trgoma naše ugotovitve razkrivajo pomembne razlike med obema trgoma v tej perspektivi. V analitičnem delu uporabljamo razpoložljive posredne ter opisne podatke. Identificirali smo dve zgodovinski obdobji. V prvem so se pojavile domače neobanke. Drugače kot v Avstriji, kjer obstaja bogata zgodovina domačih neobank, jih v Sloveniji ni bilo. V drugem prepoznanem obdobju so na obeh trgih podobno aktivne najbolj propulzivne evropske neobanke, kar povečuje konkurenco na bančnih trgih. V prihodnosti bi lahko neobanke prispevale k povečanju mobilnosti vlog v čezmejni prostor, zunaj nacionalnih bančnih trgov.

Ključne besede: neobanke, digitalne banke, čezmejno bančništvo, digitalna transformacija