

# Nontechnical summaries in English

## Climate change as a risk to financial stability

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Climate change has a significant impact on the economy, thus creating additional risks to financial stability. Financial risks of climate change broadly fall into two categories, namely physical risks and transition risks. Physical risks arise from the increase in global temperatures and from the ensuing costly weather events, such as floods, droughts and wildfires, that are becoming more common. Indirectly, these physical effects may prompt firms and households to adjust their saving and investment behavior, which may also have an impact on financial stability. Transition risks, in turn, can occur when an economy strives to become less polluting and greener (“climate neutral”) and production moves away from fossil fuels to reduce the emission of CO<sub>2</sub> (“decarbonization”). Investors in carbon-intensive financial assets consequently face a loss of value. The transition to a low-carbon economy may be driven by legal and regulatory reforms, but it may also result from technological change or shifting consumer preferences. The consequences of physical and transition risks can be manifold and may include significant asset price changes, higher risk premiums, rising financial market volatility and considerable writedowns. Ultimately, these changes may jeopardize financial intermediaries’ liquidity and solvency.

Acknowledging the need to start monitoring climate-related financial risks, several institutions have been directing considerable efforts toward analyzing and managing these risks. The Task Force on Climate-related Financial Disclosures (TCFD) has published reports that detail methods for measuring and assessing such risks. Central banks and financial supervisors have joined forces in a Network for Greening the Financial System (NGFS) to draw up recommendations for managing the financial risks stemming from climate change more effectively. The European Commission and the Austrian government have likewise launched initiatives to this effect.

Survey data show that most financial intermediaries in Austria have not yet integrated climate change into their risk management framework. Some have yet to acknowledge that climate-related financial risks exist, and only a few have already started to use indicators for measuring such risks. Together with other public bodies, the Oesterreichische Nationalbank is committed to raising awareness of climate-related financial risks in the financial sector and to providing information about relevant risk management methods.

## Small but buzzing: the Austrian fintech ecosystem

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This study aims to enhance transparency on the Austrian fintech industry by analyzing selected key features of firms classified as belonging to the fintech sector. The latter consists of start-ups and small and medium-sized enterprises that are established and operating in Austria. To compile a comprehensive overview of the Austrian fintech ecosystem, the Oesterreichische Nationalbank and Fintech Austria, the largest fintech interest group in Austria, have joined forces, providing – to the authors’ knowledge – the first study of such kind.

The fintech industry currently represents around 0.025% of the Austrian economy. However, despite still being rather small in absolute terms, the fintech industry is highly dynamic, with annual growth rates (median: 16%, average: 60%) by far exceeding those of the financial industry as a whole. The median fintech has a balance sheet size of EUR 350,000, a turnover of EUR 650,000, a workforce of six staff members and was founded some five years ago. The predominant legal form for fintechs is the limited liability company (GmbH), which is best suited to limit the financial fallout for founders in case their business idea fails.

Three-quarters of the aggregated balance sheet of the Austrian fintech industry are held by Vienna-based firms. This underlines that – even among tech-savvy internet users – innovation happens in geographical clusters. Fintechs are typically founded by men in their late 30s who have already pursued a previous career. The sector with the highest number of firms – payments – represents one-fifth of Austria’s fintechs and is characterized by disproportionately large firms. However, the last years have seen a surge in more specialized business models.

Overall, domestic natural persons account for three-quarters of investors in Austrian fintechs. Foreign investors are located, one-third each, in Germany, in other EU countries and outside the EU. In terms of total assets, however, the majority of fintechs is owned by foreign investors, followed by domestic natural persons. Almost one-half of foreign investments stems from the U.K., about one-quarter from Germany and one-sixth from the U.S.A., while the rest comes predominantly from other EU Member States.

The analysis of balance sheet components and key indicators moreover reveals that Austrian fintechs typically have about ten times as many working assets as fixed assets, which indicates a lean and effective corporate structure. Despite operating with asset-light business models, one-quarter of Austria's fintechs records negative capital ratios, with some extreme outliers.

While the fintech industry is not yet of paramount importance to the Austrian economy, its underlying dynamics warrant close monitoring to identify potential financial stability implications early on. Therefore, regular assessments of, and frequent updates on, industry trends as well as extensions to other players (e.g. bigtechs) and countries would be desirable in future studies.

### **The recent upswing in corporate loan growth in Austria – a first risk assessment**

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Austrian banks significantly expanded their lending to domestic firms in 2017 and 2018. As a result, we are witnessing the fifth period of significant corporate loan growth since 1982. The current upswing in lending, which reflects the monetary policy stance of the ECB in recent years, was not hindered by the higher capital requirements resulting from the new macroprudential capital buffers. In terms of magnitude, the current upswing is broadly in line with past increases, but the year-to-year variation is much higher than in most other loan growth periods since 1982. This article gives a first assessment of potential systemic risks for the Austrian banking system. Developments in the real economy in 2017–2018 broadly followed those during past upswings in lending. Only investment growth was stronger than during previous upswings, but starting from a historically low level. Bank loans – whose role in the financing mix of firms and in bank balance sheets was diminishing as corporate indebtedness levels decreased from the early 1990s onward – have recently become more sought after again as a substitute for other forms of corporate debt financing. These increases start from historically low levels, though, and have also been more pronounced in certain banking sectors. A potential deterioration in loan quality would therefore hit above all banks with currently high lending rates that have structurally low margins and weaker risk-bearing capacity (measured via capitalization). The main borrowers in recent years were industries with high value-added growth, high profitability and low insolvency rates. As corporate indebtedness levels have not risen as fast as corporate loan growth, banks' credit risks have not mounted as much as the strong increase in loan growth would suggest. However, banks' new lending business has been heavily concentrated on real estate activities, which may pose risks given the buoyancy of the Austrian real estate market.

### **Nonbank financial intermediation in Austria – developments since 2008**

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Nonbank finance is an alternative to bank finance that fosters competition in the supply of financing and supports economic activity. Over the past decade, it has become an increasingly important funding source for the real economy. Although increased risk-sharing across the financial system is generally seen as beneficial, nonbank finance may also become a source of systemic risk – both directly and through its interconnectedness with the banking system – if it involves activities that are typically performed by banks, such as maturity or liquidity transformation and the creation of leverage. However, these developments may also go hand in hand with increased risk-taking in such potentially less regulated parts of the financial sector, which can possibly circumvent the prudential requirements applicable to banks, and can involve new forms of risks to financial stability.

While in the EU, the relative importance of nonbank finance vis-à-vis traditional banking has increased noticeably in the past decade, the Austrian financial system is still dominated by the bank finance model. The bulk of nonbank finance in Austria is provided mainly by open-end investment funds, followed by insurance corporations and pension funds. Overall, the relatively small growth of nonbank finance assets in Austria is not seen as a concern in itself, as the risks from nonbank financial intermediation seem contained and all actors with substantial activities are subject to financial regulation and supervision. Neither the structure nor the size of nonbank financial intermediation in Austria are currently considered to pose a threat to financial stability. On the other hand, this also means that the Austrian financial system remains largely dependent on traditional banks and, hence, the economy is not able to reap the potential benefits of diversification in funding sources. Overall, the increasing importance of nonbank financial activities requires close monitoring and scrutiny of any emerging systemic risks in order to foster the development of appropriate micro- and macroprudential policies to address such risks.

## **Key takeaways from the OeNB's Macroprudential Policy Conference on “Financial stability in 2030: Maintaining effectiveness while reducing complexity”**

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Today, national and international policymakers face conflicting goals as they have to reduce the regulatory framework's complexity while at the same time guaranteeing financial stability. Due to increasing political pressure to deregulate, this issue has recently gained in prominence. The Oesterreichische Nationalbank therefore dedicated its Macroprudential Policy Conference, which it hosted on May 9, 2019, to the future of financial stability in the European Union. The conference featuring three panel discussions and two keynote addresses aimed at developing a long-term vision for 2030. To this end, high-level experts from finance, politics and academia identified the drivers of complexity and discussed how to tackle them. Drawing on national and international experience with macroprudential policy, the experts explored what the future regulatory framework – one that also includes nonbank financial intermediaries – could and should look like.

The costs of the global financial crisis have been high in all major economies and particularly high in the euro area. Improvements to the financial stability regulatory framework have strengthened Economic and Monetary Union, but regulation has, at the same time, become ever more complex. In this context, the conference participants discussed proposals to overhaul incentive structures in the banking industry. The key takeaway was the call for a high-level expert group at the EU level. This group should examine the main reasons for regulatory complexity and promptly recommend measures to reduce it. Correcting flawed incentives for banks coupled with effective macroprudential supervision and a reliable resolution framework should enable supervisory authorities to better mitigate the effects of a failing bank's market exit on both the financial system and the real economy. By extension, less emphasis could be placed on keeping all banks in business. This would help reduce regulatory complexity without endangering financial stability.