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Table of Contents

1	Introduction	4
2	The regional profiles	5
3	Crowdfunding basics	6
4	Austria - general information	7
4.1	Regional characteristics and economic situation	7
4.2	General investment situation	13
4.3	Financing of innovation	19
5	Regional Analysis on crowdfunding	21
5.1	CF actors (platforms, initiatives, intermediaries etc.).....	21
5.2	Available types of CF	22
5.3	CF volume of investment	24
5.4	Existing Regulation Framework.....	26
6	SWOT analysis of regional CF potential	28
7	Regional development demand	29
7.1	Investment and business environment.....	29
7.2	Innovation.....	30
7.3	Regulation framework	32
8	Good practice examples	33
9	List of reference documents	36

Regional profile

Austria

1 Introduction

The CrowdStream project

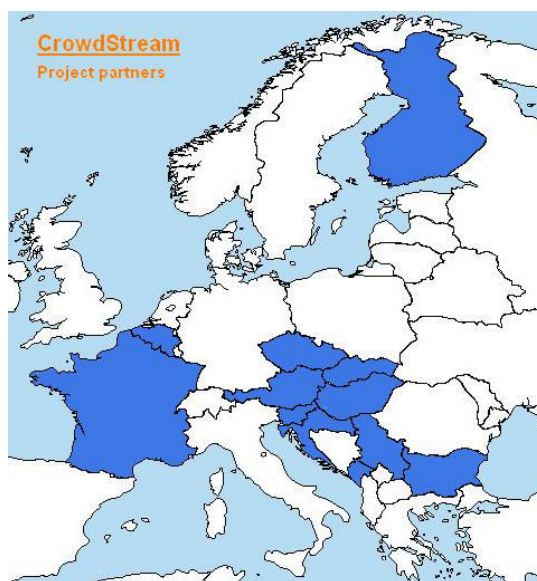
CrowdStream's main objective is to improve the effectiveness of public/private business-support for innovative spin-offs & social enterprises to access qualitative alternative financing (crowdfunding). The main project result will be improved cooperation between business-support-organisations and enterprises to guarantee a qualitative access to crowdfunding in the Danube region.

Crowd Stream outputs:

- ✓ Strategies for alternative finance (crowdfunding) in the Danube Region
 - Regional Action Plans
 - Policy recommendations for the region
- ✓ Quality tools for crowdfunding
- ✓ Capacity building for innovative small and medium enterprises (SMEs) and business support organizations
- ✓ Pilot actions

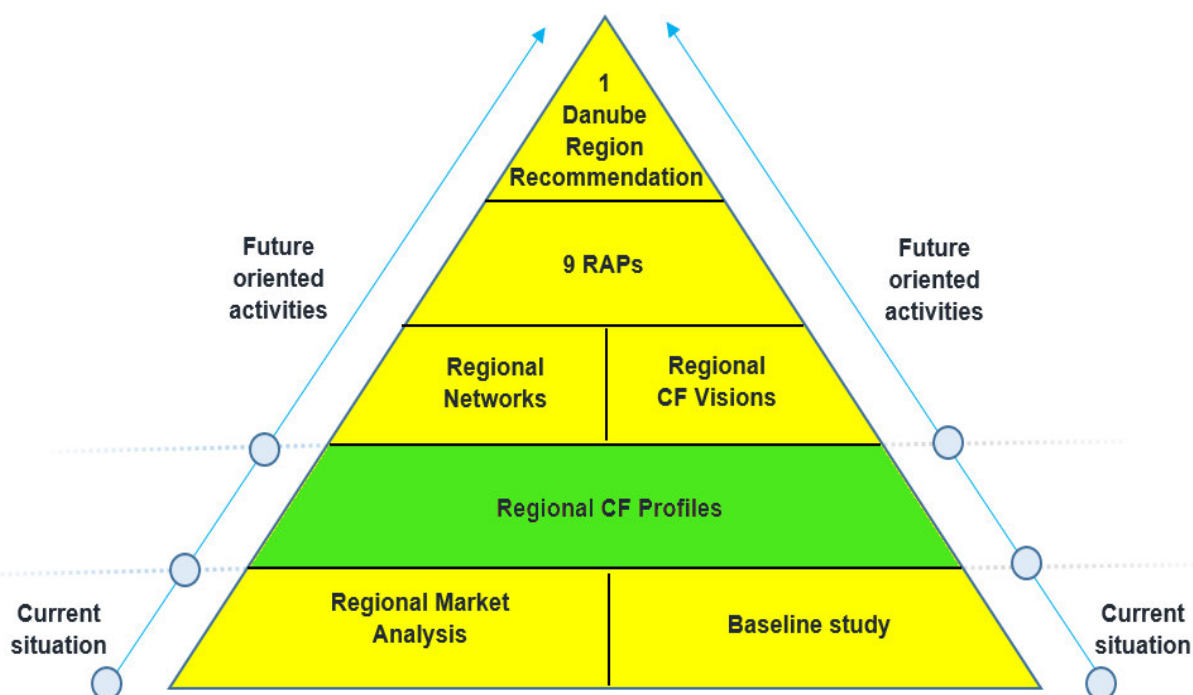
Who we are:

In this partnerships **16 organisations coming from 10 regions** aim at improving framework conditions for the development of alternative financing sources for SMEs in the Danube Region.



How we work:

The regional profiles will guide the project partners towards including relevant stakeholders in regional networks for developing the Regional Action Plan and the long-term targets on CF in their region (Regional CF visions). Those visions will enable the stakeholder groups to work jointly on the development and implementation of the RAPs and recommendations.



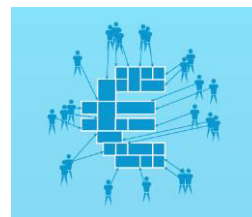
2 The regional profiles

- ✓ Describe the current situation of alternative finance in the partner regions
- ✓ Identify, inform and involve relevant stakeholders
- ✓ Support the development of common visions, Regional Action Plans (RAPs) and policy recommendations for the region

3 Crowdfunding basics

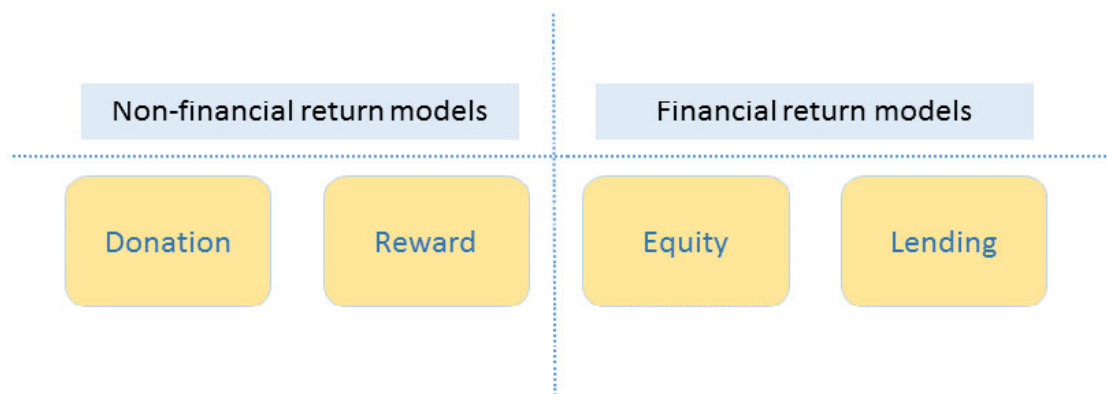
Types of Crowdfunding

Crowdfunding represents an effort from many individuals by offering a small contribution to support a project or a company in raising capital (*European Crowdfunding Network*).



Source: European Commission, Crowdfunding Explained to small and medium sized enterprises

In the case of **non-financial return crowdfunding models** individuals support a project because of emotional aspects of the campaign (donation-based) or they receive a symbolic award (reward model), which is not proportionate to the actual donation (*European Commission, Crowdfunding Innovative ventures in Europe*). The main advantages in the reward model can be attraction of first customers and a fast feedback on the commercial potential.



Financial return crowdfunding models provide an opportunity for the public to invest in start-ups or to offer loans with the expectation of a financial return while accepting some risks. The crowd could invest in early-stage companies (equity-based) or offer loans to SMEs under certain legal conditions (lending-based).

4 Austria - general information

4.1 Regional characteristics and economic situation

Austria is a landlocked country with a total area of 83, 879 m². The Alps constitute 2/3 of the total area. It is a federal parliamentary republic divided into nine states (*Bundesländer*): Vienna, Lower Austria, Upper Austria, Burgenland, Styria, Salzburg, Carinthia, Tyrol and Vorarlberg. Due to its central geographical position it is an important point in the European transport corridors. Austria joined the European Union in 1995 and adopted the euro as a national currency in 1999.

Its population is about 8,73 million inhabitants as of 2016 (Statistik Austria (2017)). Austria had the highest demographic growth between 2000 and 2014 compared to the other countries from Central and South East Europe (about 0,46% or 500,000 inhabitants in absolute numbers). However, all the countries in this region will confront with the aging process in their societies (BKA (2016)).

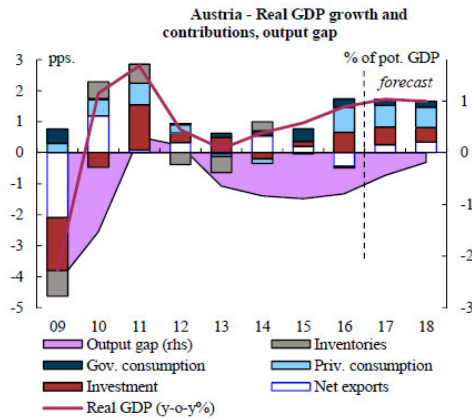
The description of a few indicators below gives an overview over the economic situation in Austria.

GDP growth

After 4 years of slow growth since 2012, Austria has strengthened its economic performance. The main growth drivers in 2016 were equipment investment and private consumption,

The tax reform in 2016 stimulated the latter one, thus, households spent more due to their higher disposable incomes. The improved domestic demand, the need for replacements after years of subdued investment, and favourable financing conditions encouraged higher investments of corporations in machinery, equipment, and non-residential construction.

On the other hand, the stronger investments were followed by an increase in the imports. This fact combined with weaker exports lead to lower net exports, which reduced the GDP growth. The European Commission expects the pick-up in the economic activity to continue in 2017 due to the main growth drivers: private consumption and investments. Exports are expected to grow faster than imports and as a result the net trade would have a positive impact on GDP growth (European Commission (2017a) and (2017b)).

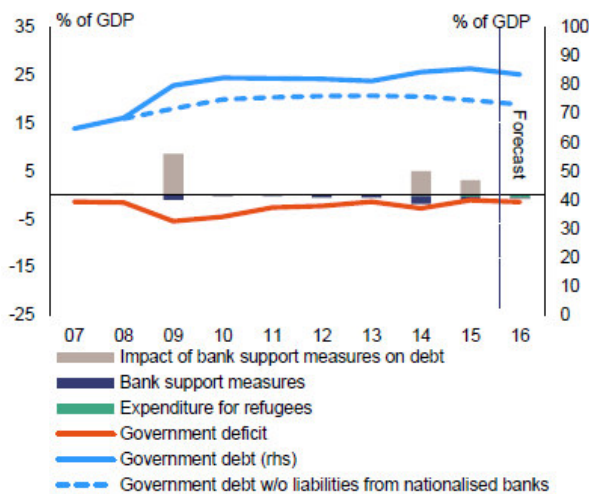


Source: European Commission (2017a)

Public finances

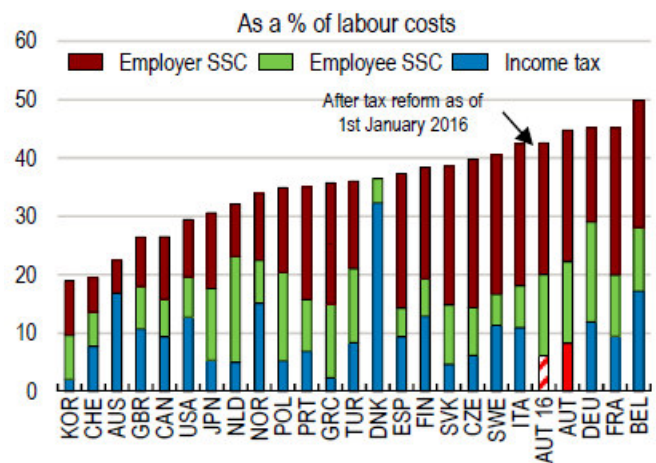
Due to the government support in the HETA case (a “bad bank” was established for the troubled former Hypo Alpe Adria bank), Austrian government debt peaked at 85,5% of GDP in 2015. The Austrian bank Kommunalkredit was nationalized in 2009 and was further swollen in 2014 and 2015 by the creation of the defeasance vehicle HETA for the former bank Hypo Alpe Adria. If one does not consider the government support in the banking sector, the government debt would have been as well above the 60% threshold (about 75% of GDP in 2016). The expectations for the further restructuring of the banking sector are that it will proceed smoothly and without significant risks. Cost related to refugees’ measures are modest compared to those in the banking sector. (European Commission (2017b))

General government debt and deficit



Source: European Commission (2017b)

Income tax plus employee and employer social security contributions, 2014*



Source: OECD (2015)

* Single individual without children at the 67% income level of the average worker. Includes payroll taxes where applicable

Tax system

The Austrian government introduced a tax reform, which entered into force in the beginning of 2016. Its main aim was reduction of income tax rates for low and medium income earners. While it boosted consumption in the short term, the labour tax wedge in Austria remains one of the highest in the OECD region due to the social security contributions (OECD (2015)).

Finance sector

Compared to its EU peers the capitalization of the Austrian banks remains below their level (according to a stress test performed by the European Banking Authority) (European Commission (2017b)). In order to increase its risk-bearing capacity and the overall resilience of the banking sector Austria has introduced macro-prudential measures in 2016. (FMA (2017a)). As for bank operations in Central, Eastern and Southern-eastern Europe, they have improved asset quality and profitability, but some challenges still remain (deterioration in asset quality in some countries, legislative measures for converting foreign currency loans etc) (European Commission (2017b)).

Labour market

After being for years part of the EU countries with the lowest unemployment rate, Austrian unemployment augmented in 2015 (BMFWF (2016a)). However, it still remains low compared to the rest of the EU. The increase in the unemployment rate was resulted from the faster increase in labour supply compared to employment opportunities. The factors behind the increase of labour force are:

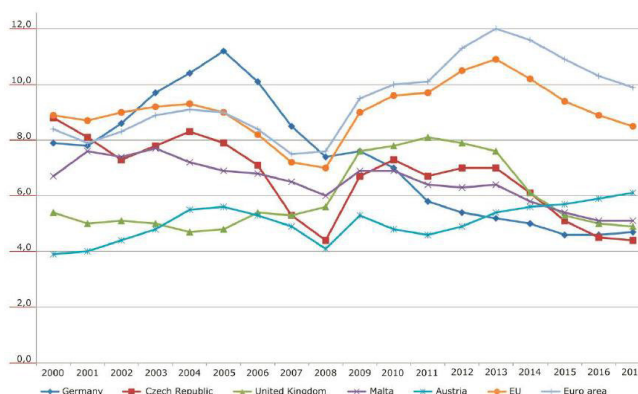
- Inflow of foreign workers (EU and non-EU)
- Longer working lives (the access to early retirement and invalidity pensions was restricted)
- Increase in female market participation
- Increase of unemployment for the low-skilled

On the other hand, part-time jobs (rather than full-time work) were the main drivers behind the increase in employment since the crisis, which is limiting unemployment to some extent (European Commission (2017b)).

BMFWF sees the reduction of non-wage labour costs initiated in 2016 and the decrease of the tax rates in the course of the tax reform as incentives for growth and employment. Furthermore, corporate as well as public investments should encourage positive developments in the labour market. Under the priorities for the employment policy are measures for increasing employment among older workers, women and stronger integration of people with impaired health and for improving the qualifications of the

domestic workforce. As for the integration of migrant workforce into the labour market, the Ministry sees the Recognition Act (*Anerkennungsgesetz*) as a good step in the right direction (BMFWF (2016a)).

Development of unemployment rates: Euro area average and best performers
Source: Eurostat, forecast of the European Commission, May 2016



Source: BMFWF (2016a)

Education

Education is an important aspect to the potential to innovate. Austria seems to face some challenges in this respect. Compared to other countries Austria is still in the middle of the range in education results. Basic skills according to PISA performance indicators continue to deteriorate. Parents' socioeconomic background and eventual migration background continue to have influence on the achievements. Native-born students are 3 times less likely to be low-achievers and 3 times less likely to leave school early before completing upper secondary education compared to first generation immigrants. As for the use of digital teaching tools: 90% of nearly all teachers use digital means and the internet for preparing lessons, but still less during the lessons. The Government launched a new digitalization strategy which envisages in its programme 2017-18 which envisages equipping all schools with broad band and wireless internet access by 2020/21 and introducing teaching basic digital skills into the regular curriculum of primary and lower secondary schools.

Further challenge is the growing demand of ICT specialists, digital skills among the general workforce and e-entrepreneurs. Students are less motivated to engage in science and the share of ICT experts as a part of the Austrian workforce (4%) is only around the EU average. The lack of motivation hampers the needed increase in human resources devoted to science, technology, engineering and mathematics. Austria has on focus education and digital skills as one of the 12 areas of the Digital Roadmap Austria (European Commission (2017b)).

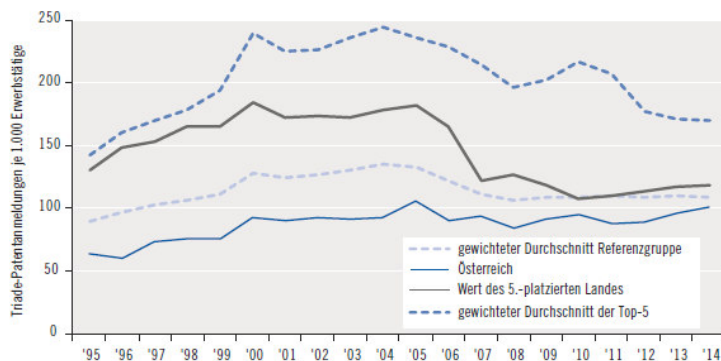
Innovation policy

Austria has set the goal of becoming one of the innovation leaders in Europe. In 2015 R&D expenditure as a percentage of GDP has increased and reached 3.07 % (2013: 2.97 % ; 2014: 3.06 %). Although it ranks second among EU Member States for public and private spending, it progress still needs to be made to meet the ambitious 2020 target (3.76 % of GDP).

The indicators below can give further insight into Austrian R&D situation as an important aspect of innovation.

The number of patent registrations (here “triad patents: patent registration made in US-American, Japanese and European Patent Offices) is an indicator for the new technical knowledge. While the average value for patent registration has decreased since 2004, Austria had a constant development in the patent intensity and increased this value in 2013 and 2014. The gap to the average value of countries in the Top 5 ranking though remains considerable (BMFWF / BMVIT (2017)).

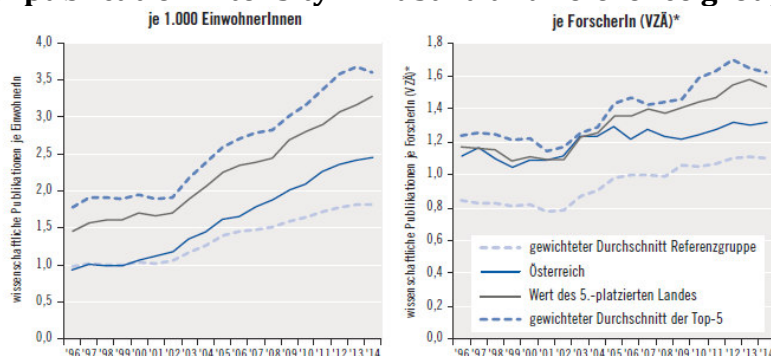
Development of patent intensity (triad patents) in Austria and Reference groups, 1995-2014



Source: BMFWF / BMVIT (2017)

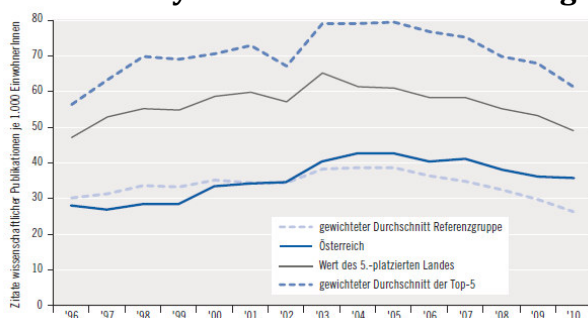
Scientific publications is an important indicator on the scope of scientific research (footnote: OECD (2016)). While there is a steady growth in the number of scientific publications per 1000 inhabitants, the value per researcher has a moderate increase (VZA= researchers from universities, state research institutions and partly researchers from the private sector). BMFWF and BMVIT considers these efforts as not sufficient for getting closer to the leading countries in this area. The number of article quotations in other publications shows how far the scientific results were further used and developed. In 2002 Austria reached the average value and then the gap to this value grew from year to year. Top 5 countries in the reference group for 2010 are Switzerland, Denmark, Netherlands, Sweden and Singapore (BMFWF / BMVIT (2017)).

Development of publication intensity in Austria and reference groups, 1996-2014



Source: BMFWF / BMVIT (2017)

Development of citation intensity in Austria and reference groups, 1996-2010



Source: BMFWF / BMVIT (2017)

In its Research and Technology report 2017 BMFWF and BMVIT refer to **international innovation indicators and rankings**. According to evaluation of indicators referring to EIS from previous years (European Scoreboard for measuring innovation performance) the gap between Austria and the leading countries in this area has fallen by almost a halve since 2008. Looking at other international rankings such as Global Competitiveness Index (looking at fields connected to innovation; human resource, education, technological development, business capacities such as innovation) in spite of good results in “business sophistication” the whole result for Austria is relatively weak (due to technological development status/IT-equipment and use). However, the report concludes that such a global index refers to indicators depending on the country size and the small Austrian economy could not score well in this context (BMFWF/ BMVIT (2017)).

Digitalisation

As part of its aspiration for one of the innovation leaders in Europe, Austria adopted Digital Roadmap Austria (national strategy for the digital future until 2025) and addressed digitalisation as one of the key priorities in its government programme 2017-18. In many aspects of digitalization Austria ranks well and public authorities offer a wide range of e-government solutions. However, Austria is below the EU average when it comes

to investment in digital skills, e-commerce, e-procurement and the deployment of high-speed broadband in rural areas (European Commission (2017b)).

Digitalisation and innovation plays an important role in the **business sector** as well (BMWWF/ BMVIT (2017)). These developments are important for the technological performance of Austria as a whole. Higher productivity coming from knowledge intensive services and digitalized ICT services have positive effects for the whole economy. Generally, investments in digital product technologies are expected to bring productivity gains. International companies are mainly pioneers in such new technologies. Alongside existing research and technology fundings **digitalization issues for companies are further reflected in reference to National Cluster platform as part of the Digital Roadmap.**

In its Research and Technology report BMWWF / BMVIT refers to the European Manufacturing Survey (EMS measures technical and organizational innovation in the production and the aimed productivity improvements/ ISI Fraunhofer) as a measurement for the digitalization of industrial production (**Industry 4.0**) in Austria. According to it, big international companies and mass producers are mainly benefiting from such technologies. The main drivers behind that are that bigger company can more easily bear the investment costs and investment risks. Furthermore, as they have more possibilities for the use of these technologies, they have higher motivation to invest.

The business **service sector** plays an important role in the Austrian economy. It is the pioneer in digitalization and innovation in Austria. R&D expenditures in this sector increased from between 1998 and 2013 22% to 37% as part of the whole R&D investments in the business sector. R&D expenditures in the service sector grow faster (on average 11,6% per year) compared to those in manufacturing (6,5% per year). The highest growth of these expenditures is in R&D biotechnology, information technologies, trade and information services. The degree of innovation is very high in knowledge-based business services which goes beyond universities and research bodies. Those companies act as external knowledge source for specialized innovations and are extremely useful for SMEs in providing them access to specialized and complex knowledge (BMWWF / BMVIT (2017)).

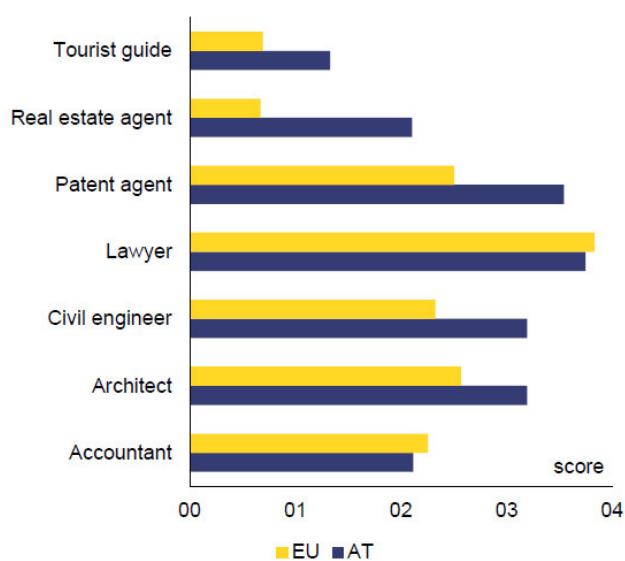
4.2 General investment situation

Investments in 2015 improved and are forecasted to continue growing (by 3.6 % in 2016, by 2.4 % in 2017 and 2.0 % in 2018) (European Commission (2017b)). In 2015 49% of all the investments was in machinery and equipment, followed by land, business buildings and infrastructure (17%). Overall 16% of firms in Austria have invested in another country, one of the highest shares in the EU (EIBIS (2016)). The main drivers behind this growth are greater spending on equipment and non-residential construction, which is

compensating for the postponed replacement investment. Higher volumes of investments are planned in the manufacturing and exporting sectors, while companies in the service sector (other than tourism) and SMEs in general are undecided (European Commission (2017b)). The main barriers to investments are the political and regulatory climate EIBIS (2016).

Service sector has a considerable share in the Austrian economy (market services defined as NACE sectors G to N directly account for 50 % of GDP and 45 % of employment. Furthermore, around 35 % of the value created by Austrian manufacturing is created by service inputs (European Commission (2017b)). Yet it has one of the highest regulatory barriers among EU member states: for example, high access barriers and restrictive rules on the exercise of key trades and professions (see graphic below).

Regulatory restrictiveness indicator 2016, Austria and the EU

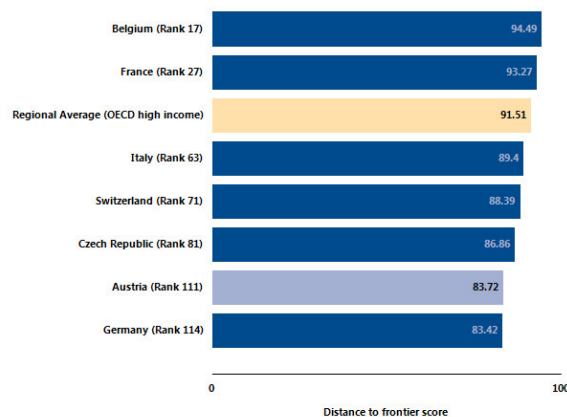


Source: European Commission (2017b)

Business creation and expansion

Business creation in Austria is important for the employment sector as Austrian start-ups account for average 2.4 jobs in the first year and 7.4 jobs in the first 3 years of their existence (European Commission (2017b)). Austria's business environment has traditionally been difficult for starting a business. Austria stands globally at 111 in the ranking of 190 economies on the ease of starting a business (World Bank (2017)).

How Austria and comparator economies rank on ease of starting a business



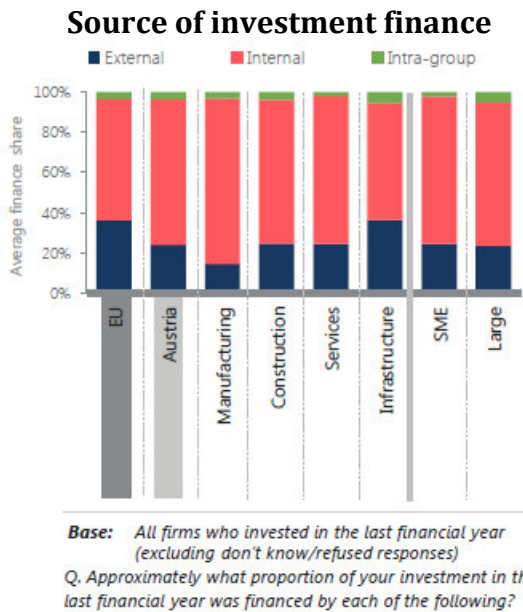
Source: World Bank (2017)

The general recovery of the economy and the Austrian 2015 start-up strategy (*Land der Gründer*) have facilitated the increased start-up numbers. Although these start-ups have a good chance for surviving (business survival rate in Austria in 2013 is 74%; EU average: 65%), they face some expansion difficulties. The share of high-growth firms among active companies with at least 10 employees is at 7.3 % considerably below the EU average of 9.2 %. Furthermore, fast-growing innovative firms represented only about 2.1 % of employment in the Austrian business economy compared with an EU average of 3.3 %

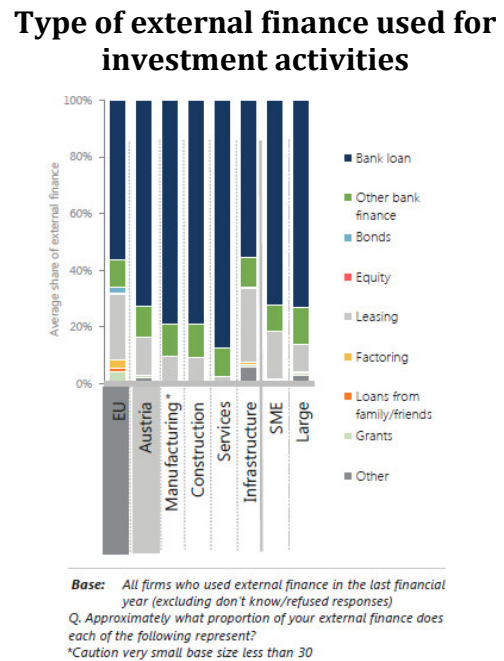
It takes 8 days to start a business in Austria and it costs 305 euro on average (compared to EU targets: 3 days and 100 euro). Cultural obstacles play as well an important role: entrepreneurial culture in Austria is below the EU average (0.32 compared to 0.42). The European Commission sees more difficulties in insolvency procedures, which is a further deterrent for possible entrepreneurs (European Commission (2017b)).

Funding of private sector investments

Companies in Austria finance largely their investment activities from internal funds (72%; EU average: 60%). The internal financing in the manufacturing sector accounted for 82% of the investment finance. Usually Austrian companies rely on bank credits for external funding and would like this type of financing to play more prominent role (EIBIS (2016)).



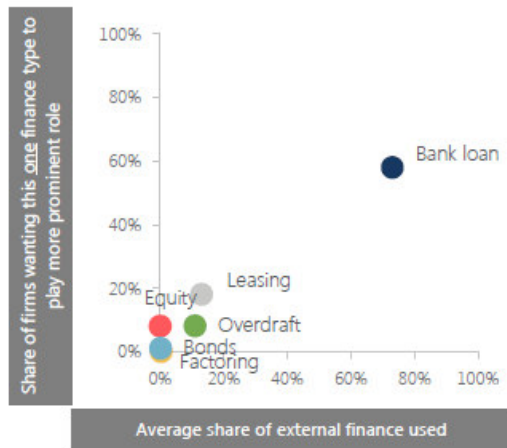
Source: EIBIS (2016)



Source: EIBIS (2016)

The proportion of finance constrained Austrian companies (6%) is slightly above the EU average (5%). The highest share of such companies is in the infrastructure and manufacturing sector, followed by SMEs and large companies (EIBIS (2016)).

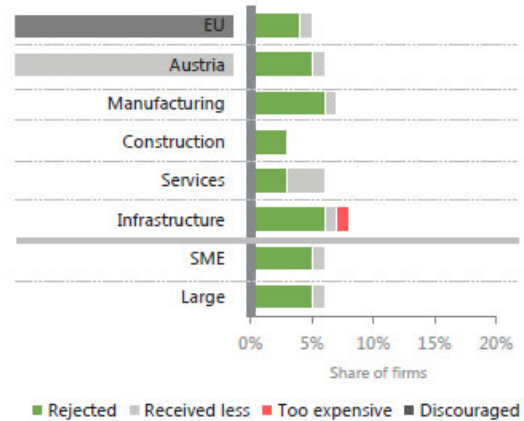
Type of finance used versus the one type of finance firms want to use



Base: All firms who used external finance in the last financial year (excluding don't know/refused responses)
Data is derived from two questions: firms were first asked about the types of external finance used in the last financial year and then which one type of external finance they would want to have a more prominent role over the next 3 years

Source: EIBIS (2016)

Share of finance constrained firms



Base: All firms
Finance constrained firms include: those dissatisfied with the amount of finance obtained (received less), firms that sought external finance but did not receive it (rejected) and those who did not seek external finance because they thought borrowing costs would be too high (too expensive) or they would be turned down (discouraged)

Source: EIBIS (2016)

Austria is ranked 62 out of 190 economies for ease of getting credit (World Bank (2017)). Just 7% of Austrian companies assess receiving a bank funding as problematic. However, availability of small-scale financing is declining and private business could benefit from more diversified Austrian funding system. An example for a positive impact of the regulatory framework on funding options is the adoption of the Alternative financing law (2015) followed by an increase in crowdfunding activities (European Commission (2017b)).

Venture Capital financing (a type of private equity capital provided by firms or funds to newly created companies) relies mainly on the public sector due to the weakness of private financing. Venture capital as % of GDP in 2015 (0,051%) is below the EU average (0,063%).

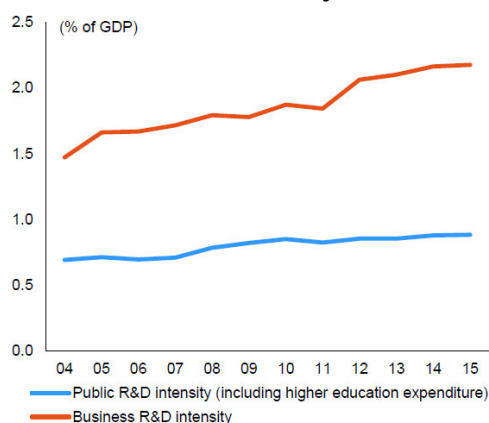
4.3 Financing of innovation

Like in other comparable Member States R&D expenditure in Austria is growing slowly especially in the public sector.

All sector will face increase in the R&D expenditures. The **public sector** in Austria finances about 36% of R&D expenditures in Austria, which is mostly financed by the federal government (*Bund*). In 2017, the *Bund* is expected to achieve the most significant increase in the R&D expenses compared to the previous year (about 5,5%: + EUR 178,3 million) and reach EUR 3,44 billion. A significant driver behind that is the increase in research bonus (*Forschungsprämie*, increase in the financial assistance amount for tax-deductible R&D expenditures in companies). The provinces (*Bundesländer*) are expected to increase their R&D expenses by 4,3% (+ EUR 21,4 million) and reach EUR 514,5 million. Increase in the R&D expenditures of other public authorities (communities, chambers, social insurance carrier) is forecasted as well (2,7% /+ EUR 3,2 million; amount: EUR 121,9 million). Public R&D expenditures amount for 1,1% from GDP.

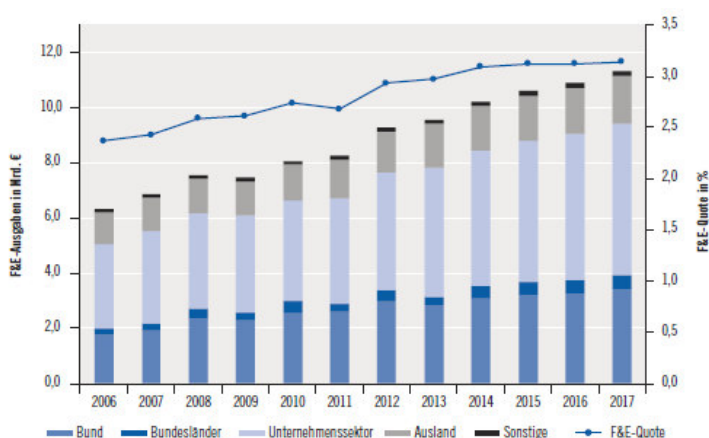
The biggest share of R&D expenditures (as in previous years) is expected to come from the **business sector** (48,2%). This funding corresponds to EUR 5,46 billion (increase by 3,1%; + EUR 163,1 million) and to 1,5% from GDP in 2017. Expenditures from **abroad** are predicted to reach EUR 1,74 billion as the main part of them comes from foreign companies financing their Austrian subsidiaries (incl. financing deriving from EU research programmes). Business expenditures from abroad together with domestic business financing makes up about 63% of the whole R&D expenditures. 0,5% from the R&D financing will come from the **private charitable sector** (BMFWF / BMVIT (2017).

Evolution of business and public R&D density



Source: European Commission (2017b)

Expenditures on R&D in Austria in finance sectors



Source: BMFWF / BMVIT (2017)

Besides universities the biggest state support agencies are Wissenschaftsfonds (FWF), Forschungsförderungsgesellschaft (FFG) and Austria Wirtschaftsservice (aws). Further research bodies are Ludwig Boltzmannengesellschaft (LBG), Christian Doppler Forschungsgesellschaft (CDG), Österreichische Akademie der Wissenschaften (ÖAW), Institute of Science and Technology Austria (IST Austria) as well as Austrian Institute of Technology (AIT) (BMWWF (2017a).

Bigger international companies and mass producers are mainly investing in digitalization of industrial production (Industry 4.0). The business service sector is the pioneer in digitalization and innovation in Austria. R&D services in the business sector (if they are done for third parties) accounted for about 1 billion in 2013 (16% of the whole R&D expenditures in the business sector). The main actors here are Austrian Institute of Technology (AIT), JOANNEUM RESEARCH or competence centers, even start-ups, which do mainly research and have not yet started producing (BMWWF / BMVIT (2017).

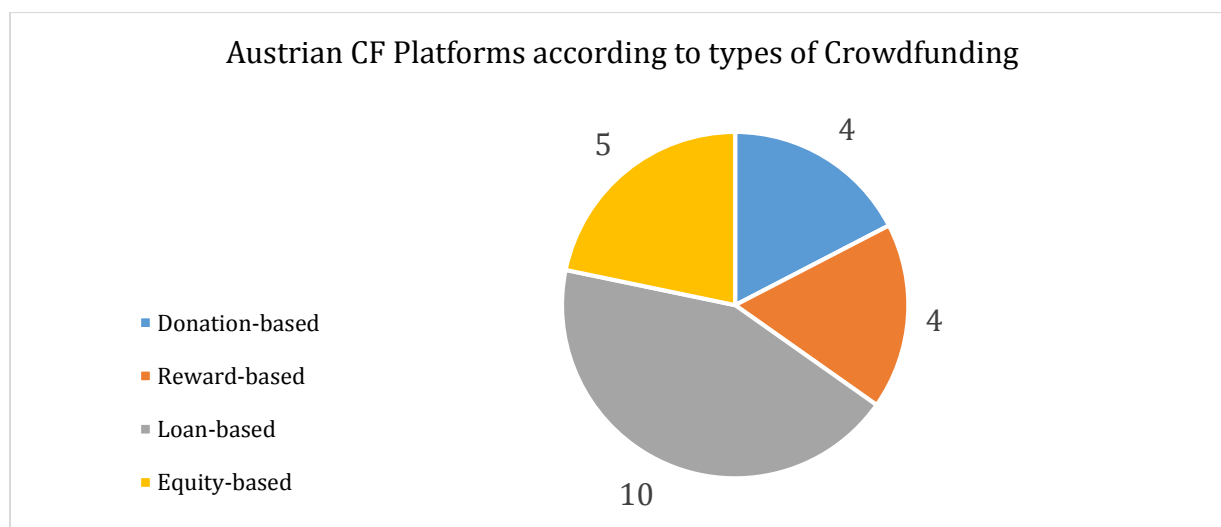
5 Regional Analysis on crowdfunding

5.1 CF actors (platforms, initiatives, intermediaries etc.)

CF platforms

Alongside international CF platforms (e.g. *Kickstarter*, *Indiegogo*, *Wemakeit*, *Companisto*, *Startnext*), 20 Austrian-based platforms were identified as of April 2017. While some of them act primarily on the Austrian market (e.g. *1000x1000*, *Dagobertinvest*, *dasErtragReich*, *Fundraizer*, *Respekt.net*), other try expanding to German-speaking countries (Germany and Switzerland). Such examples are *Greenrocket/ Home rocket/ Lion rocket*, *primeCROWD*, *Rendity*, *regionalfunding.at* and *Finnest*. An interesting fact is that some banks have their own CF platforms: BAWAG P.S.K. (*Es geht!*) and Raiffeisenlandesbank Vorarlberg (*Mit einander Vorarlberg*). *Bank für Gemeinwohl* (Public welfare bank) has set the goal of financing and promoting ethical, social and environmentally oriented projects and company.

The local platforms cover various topics e.g. innovative SMEs and start-ups, real estate projects, food and beverage, social and creative projects as well as climate and energy ones. All four types of Crowdfunding are present in Austria. While there are just a few platforms, which specialize in just one type of Crowdfunding, most of the platforms expand their services and offer more than one type. Out of 20 local platforms, 4 have donation- and reward-based CF projects, 5 of them equity-based ones and 10 loan-based ones.



Source: Austrian Stakeholder mapping, CrowdStream

Finance

Important stakeholders here are state institutions such as *ministries, the National Bank and the Financial Market Supervision*. 19 business angels and investment companies support start-ups and SMEs in different areas such as innovation, ICT, Cleantech and Medtech.

Public & Intermediaries

Austria has a vast range of public and private incubators and accelerators. Some of them are: *AplusB, INiTS, Innovation Incubation Center – TU Wien, Ludwig Boltzman-Stiftung Wien, Immipreneurs of Austria, A1 Startup Campus, Alps ventures, Frequentis – Start-up centre, Impact Hub Vienna and Blue Minds Company*. Among state-funded innovation / business support agencies such as **Wirtschaftsagentur Wien**, there are some other, which focus on support for students (e.g. *Social Entrepreneurship Forum Vienna, WU Gründungszenrum and [sic!] at the University for Natural Resources and Life Science*).

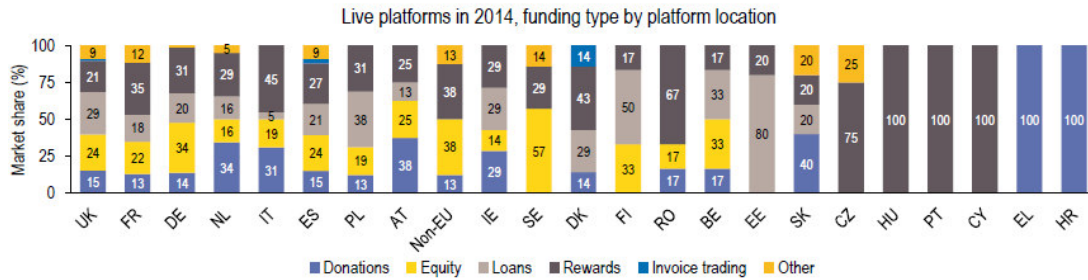
The *Economic Chamber* (Wirtschaftskammer / Fachverband Finanzdienstleister), which represents the interests of Austrian companies, has created a specialized expert group on Crowdfunding platforms. Other relevant stakeholders are *Arbeiterkammer (Chamber of Labour), Junge Wirtschaft, Vereinigung der Österreichischen Industrie and European Crowdfunding Network*.

5.2 Available types of CF

The desk-based research in the framework of CrowdStream project (stakeholder mapping) showed that all four types of crowdfunding exist at the moment in Austria (2017).

Due to the different provider, it is difficult to differentiate between online fundraising and “offline” donations. In 2014 donations accounted for EUR 550 million, which indicated an increase by EUR 40 million compared to the previous year (ISN (2015)). The national regulations provide an opportunity for tax deductability for private persons and companies (BMF (2017)), which might explain this increase. According to the European Commission (European Commission (2015) donation accounted for a relatively large proportion of platforms in Austria (2014).

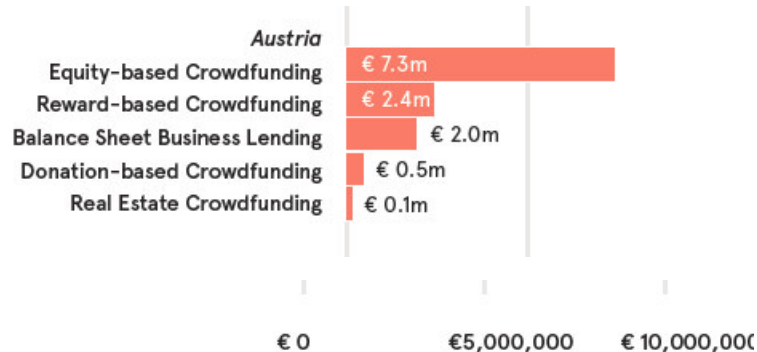
Analysis of platforms in the EU by funding type and location



Source: Platforms database, Crowdsurfer Ltd. in European Commission (2015)

However, equity-based financing accounted for the highest volume of alternative financing in 2015 compared to the other models (University of Cambridge (2016)).

Total Alternative Finance Volume by Model Breakdown



Source: University of Cambridge (2016)

Some examples of lending-based crowdfunding can be found in the company Grüne Erde. Alternative energy projects are more often financed in this way in the last years (ISN (2016) see also Grüne Erde/ Beteiligungsmodell and Wien Energie/ BürgerInnen Kraftwerke)

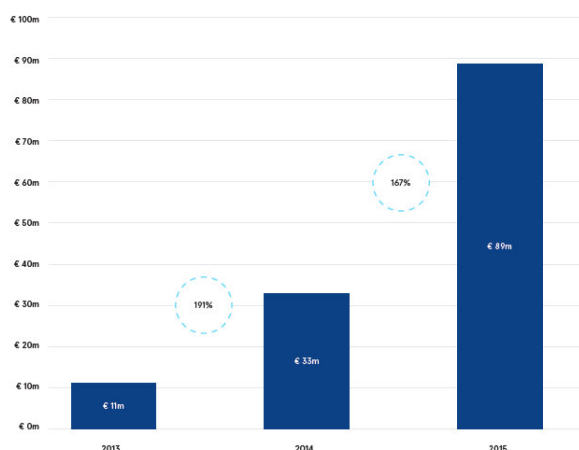
Some of first CF platforms connected to financial return models appeared on the Austrian market in 2012/2013 and since then their number has increased. While there are national platforms providing this service (e.g. Dogobertinvest, Dasertragsreich, 1000x1000), there are transregional platforms acting on the German-speaking market (AT, DE, CH) or Europe-wide (e.g. Greenrocket, Startnext, Wemakeit). The topics and target groups have a wide range: from start-up, finance, credits, technology and innovation sector to food and

beverage, social, creative and healthcare. Some of the platforms refer to quality standards such as ACC crowdfunding, Österreichisches Gütesiegel E-commerce, European Trust Mark EMOTA; Lemonway (CrowdStream, Stakeholder mapping in Austria)

5.3 CF volume of investment

Online alternative finance in Central and Eastern Europe amounted for EUR 11 million (2013) and increased rapidly by more than 150% in 2014 (EUR 33 million) and 2015 (EUR 89 million) (University of Cambridge (2016)).

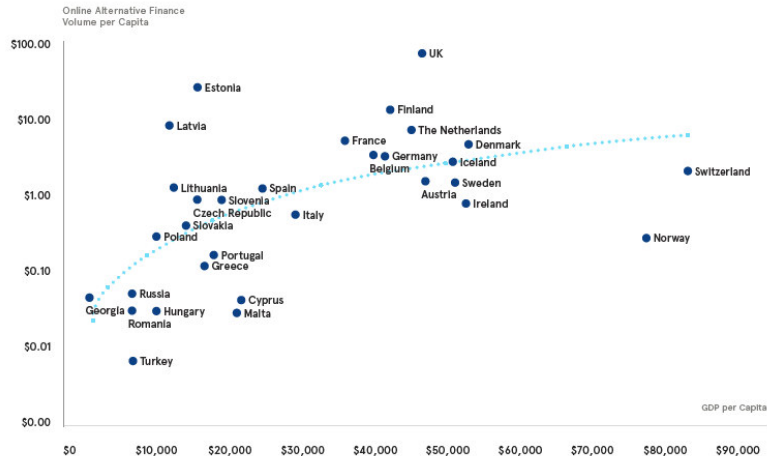
Online Alternative Finance Market Volumes in Central and Eastern Europe 2013-2015 (€ EUR)



Source: University of Cambridge (2016)

Online per capita volume in Austria was 1,45 dollar, which compared to the relative economic strength of the country (GDP per capita) lies below it. Zheng et al. explain generally tendencies underperformance with strong non-investment models (reward-based or donation based crowdfunding) and outperformance with strong peer-to-peer consumer and business lending activities. Furthermore, contributions per fundraiser from individual funders will be lower in a non-investment focused model. Regulatory barriers might hinder as well investment activities (peer-to-peer lending and equity-based crowdfunding) and result in underperforming (University of Cambridge (2016)).

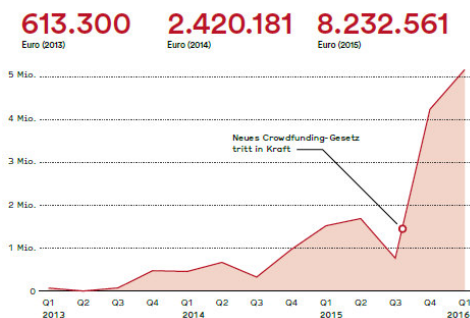
Total Online Alternative Finance Volume per Capita vs GDP per Capita (\$ USD)



Source: University of Cambridge (2016)

According to the Economic Chamber in Austria (WKO (2016)) the amount of successful project investments in Austria increased rapidly between 2013 and 2016. The financing volume reached EUR 13,55 million in the first half of 2016, which is by EUR 4,8 million higher compared to 2015. Since the Federal Law on Alternative Financing entered into force (September, 2015), the amount of such financing has increased three times. 106 projects were financed and 17 didn't reach the funding threshold since Austrian platforms exist. The total sum for the financed projects is EUR 25,29 million.

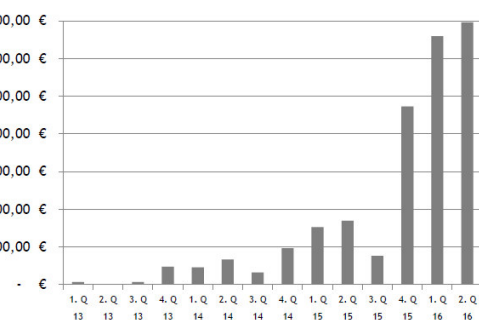
Crowdfunding in Austria (Raised amount of money)



Source: BMWFV (2016b)

*The point in Q3, 2015 indicates the moment when Federal Law on Alternative Financing entered into force

Project volume of successful funding (quarterly)



Source: WKO (2016)

5.4 Existing Regulation Framework

The Alternative Financing Act entered into force in September 1, 2015. Some its main aims are to create a transparent legal framework for making Crowdfunding and Lending-based Crowdfunding easier, to make it cost-effective and easy for the issuer and to provide minimum protection for the investors (BMFWF presentation (2017)).

The issuers must fulfil the criteria for an SME (Recommendation 2003/361/EG): less than 250 employees, max. EUR 50 million turnover or max. EUR 43 million balance sheet total. They can collect money from alternative financing instruments for their operative activity. The collection must be preceded by a public offering on 150 or more investors (BMFWF (2017b)).

The Act defines the role of platforms for alternative financing as a mediator between the investor and issuer in terms of announcement and implementation of projects. Furthermore, they need a license to work as a trade financial consultant (*gewerblicher Vermögensberater/ Vermittlung von Veranlagungen*) or a concession for an investment service provider (*Konzession des Wertpapierdienstleistungsunternehmen / Vermittlung von Wertpapiere*). The platform itself cannot be an issuer. It must publish specific information on its website (e.g. legal form, owner, headquarter, payments coming from investors and issuers, criteria for choosing issuers in the platform) (BKA 2017).

Alternative financing instruments can be: shares, bonds, business shares in companies or cooperatives (*Kapitalgesellschaften* or *Genossenschaften*), participating rights, silent partnerships and subordinated loans (not necessarily with a repayment claim) (BKA 2017).

It lays down restrictions on the invested amount by investors: EUR 5,000 per investor per project in 12 months. Higher investments are possible in case of voluntary disclosure of financial details to auditors or platforms stating that maximum the double average net income per month or max. 10% of the financial assets is invested (BMFWF presentation (2017)).

Obligations to publish a complete capital market prospectus will first apply starting with an issue volume of EUR 5 million. For issuance of a volume of between EUR 1.5 million and EUR 5 million only a simplified prospectus (prospectus requirement light) is required. Only an information sheet is requested for issues between EUR 100,000 and EUR 1,5 million. A similarity to the Consumer protection law is that investors have the right to withdraw within two weeks (ABA (2015)).

Further relevant regulations are:

<http://www.interreg-danube.eu/approved-projects/crowdstream>

- Federal law to transform EU Directive 2003/71/EC into Austrian law (Bundesgesetz über das öffentliche Anbieten von Wertpapieren und anderen Kapitalveranlagungen und über die Aufhebung des Wertpapier-Emissionsgesetzes (Kapitalmarktgesetz – KMG/ Capital market law)
- Directive 2003/71/EC of the European Parliament and of the Council of 4 November 2003 on the prospectus to be published when securities are offered to the public or admitted to trading and amending Directive 2001/34/EC (Text with EEA relevance)

6 SWOT analysis of regional CF potential

STRENGTHS

- Increase in R&D expenditures (public+private)
- Strong business support organisations
- Public start-up support
- Well-developed legal framework
- Raising interest in alternative financing
- High digitalization and innovation tendencies in companies
- Central geographical position

REGIONAL WEAKNESSES

- Lack of enough ICT specialists
- Insufficient digital skills
- Low motivation for studies in science and technology
- Financial return models less known/used compared to non-financial ones
- Investment barriers in the business sector

OPPORTUNITIES

- Good examples / Success stories
- Austria set goal for becoming one of the innovation leaders in Europe
- Government strategies and fundings for innovation/ digitalisation
- Growing supply and demand for different types of CF
- More sectors interested in CF (e.g. renewable energy)
- Knowledge-based service sector grows

THREATS

- Small economy
- Low public awareness on shared economy
- Further developments in specific digitalization areas needed
- SMEs/start-ups does not have enough capital for investment / innovations

7 Regional development demand

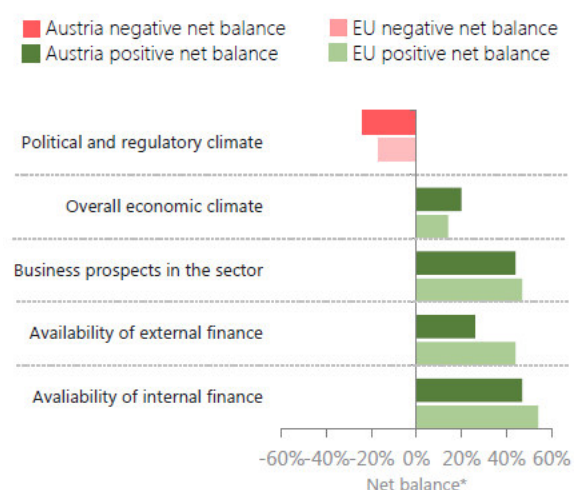
7.1 Investment and business environment

Companies' perspective

Companies in the service sector and SMEs are looking forward to replacement investment for the next 3 years. In the case of SMEs they are followed by new products/services and capacity expansion. Manufacturing firms and large firms in Austria are more likely than others to prioritise capacity expansion. Austria has the highest share of companies in EU (87%), which believe that they invested the right amount to ensure the success of their business going forward. Companies from the construction sector (about 12%) and SMEs (9%) have the highest share of companies, which consider they invested too little (EIBIS (2016)).

Companies consider political and regulatory climate as the main barrier for implementing planned investments in Austria in the short term. In the long term, the main structural barriers are availability of staff with the right skills, business and labour market regulations and uncertainty about the future (EIBIS (2016)).

Short term influences on investment



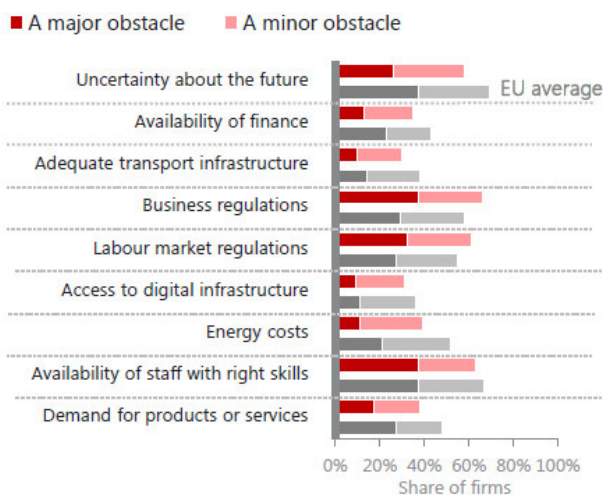
Base: All firms who have planned to invest in the current financial year

Q. How do each of the following affect your ability to carry out your planned investment. Does it affect it positively or negatively, or make no difference at all?

*Net balance is the share of firms seeing a positive effect minus the share of firms seeing a negative effect

Source: EIBIS (2016)

Long term barriers to investments



Base: All firms (data not shown for those who said not an obstacle at all/don't know/refused)

Q. Thinking about your investment activities in Austria, to what extent is each of the following an obstacle? Is a major obstacle, a minor obstacle or not an obstacle at all?

Source: EIBIS (2016)

Macroeconomic perspective

The lack of opportunities in a climate of uncertainty and subdued consumption are the main macroeconomic constraint on investment. Public investment is in demand because of the growing housing demand and the need of higher investment in social housing. Providing such financial resource without affecting other financial positions might be a macroeconomic constraint for the Austrian public authorities. The main barriers to investment are listed below. However, the European Commission assessed them as relatively modest overall.

- Business environment: regulatory / administrative burden, public procurement / PPPs
- Financial sector: taxation, access to finance
- Sector specific regulations: business services / regulated professions

Some reforms for improvement include labour taxation, regulated professions and administrative simplification. More measures are needed for the improvement of business environment for start-ups and high-growth companies and meeting consumption and housing demand (European Commission (2017b)).

7.2 Innovation

Looking at the regional innovation strategies of Lower Austria, Upper Austria and Burgenland, it is noticeable that main priorities are, for example, educating professionals, attracting international experts, supporting production-related research, specialization in niche technologies, participation in international research networks and knowledge transfer and provision of basis framework for business development

The table below shows similar topics in the long-term regional strategies of the three Austrian regions. The topics are interconnected and can refer as well to other points in the specific regional strategy. Therefore, this table should not be considered as a final comparison of the three regional strategies, but rather as a reference point for analysis (See Regional Management Burgenland, Innovatives Oberösterreich 2020, Ecoplus).

Innovation strategies in the region		
Lower Austria	Upper Austria	Burgenland
<p>Cluster Lower Austria</p> <ul style="list-style-type: none"> * Bau.Energie.Umwelt Cluster NÖ (* 2001): energy efficient construction and renovation, ecological construction materials * Lebensmittel Cluster NÖ (* 2006): regional and biological products, food safety, resource efficiency * Kunststoff-Cluster (* 2005): biological synthetic materials, compounding, recycling * Mechatronik-Cluster (* 2010): energy efficiency, competence mapping * Logistik Cluster NÖ (* 2008): logistic competences, pooling, transfers * „e-mobil in niederösterreich“ (* 2010) 	<p>Industrial production processes</p> <ul style="list-style-type: none"> * Upper Austria has set the goal to become leading industrial region in Europe in 2020 and to provide competitive products and services in a globalized economy * Leadership in Technology; consistent productivity growth; flexibility in the area of industrial production processes and methods; integration of more innovative sustainable production methods; greatest possible energy and resource efficiency (circular economy/material flows) * Use of technically advanced, adaptive and high-quality production processes, which will lead to securing a high value added share and work positions 	
<p>Innovation capacity</p> <ul style="list-style-type: none"> * Development of new technology competences * cooperation with new partners 	<p>Education</p> <ul style="list-style-type: none"> * children and youth learn to work with new technology at an early age, think interdisciplinary and develop interest for technical matters * new courses of studies, education and trainings measures in this field; international focus already in the beginning phase of studies; possibilities for internships abroad * increase in the number of engineers (incl. share of women) * long-term measures for educating professionals e.g. dual trainings, life-long learning measures for employees in the production sector 	<p>Research and Innovation through cooperation</p> <ul style="list-style-type: none"> * support for technology transfer between R&D and SMEs * promotion of networking and cooperation, creation of research networks in cooperation with enterprises * development of additional regional-specific range of courses for professionals and academia
	<p>Research</p> <ul style="list-style-type: none"> * extensive further research developments concerning production-related areas and relevant key technologies (ICT, raw materials, mechatronics etc.) * extension and transfer of regional research competencies to international research networks * leading region for interdisciplinary production-related research; participation in national and european research programmes and initiatives for topics related to production processes 	<p>Develop potentials in the area of Research - Innovation - Knowledge</p> <ul style="list-style-type: none"> * Focus on new research topics in the area of nature, culture, ecological and cultural tourism, health, quality of life, wellness, buildings, energy, environmental technology, accessibility * Further development of research centres and excellent research
<p>Technopol Programme / Specialization in niche technologies</p> <p>4 technopol locations:</p> <ul style="list-style-type: none"> * Medical biotechnology (Krems) * Agricultural and environmental biotechnology (Tulln) * Medicine and material technologies (Wiener Neustadt) * Bioenergy, agricultural and food industry (Technopol Wieselburg) 	<p>Economy</p> <ul style="list-style-type: none"> * attractive basic conditions for companies in the productive sector and active promotion of initiatives for further company developments or settlement of new companies * research headquarters and SMEs in niche sectors support economy stability * provision of industrial-related services * provision of professional support and risk capital for start-ups and spin-offs * attractiveness for international professionals and talents, top management executives and excellent research groups 	<p>Development of Resource efficiency, use of raw materials and new energy technologies through research</p> <ul style="list-style-type: none"> * development of regional know-how for the whole conversion process "primary energy - energy sources - energy services" and "raw resource - raw materials - utilization" * improvement of resource management and coordination of available raw resources * further development of methods and projects for reutilization/recycling * active application of research and networks on renewable energy and resource efficiency, regional raw material utilization
	<p>"Production location 2050" (Produktionsstandort 2050)</p> <ul style="list-style-type: none"> * implementation of strategic economy and research program "Innovative Upper Austria 2020" (esp. in the Action areas of "Industrial production processes" and "Mobility/Logistics") 	

7.3 Regulation framework

Some important regulatory framework concerning promotion of research, technology and innovation is laid out in:

- ✓ **Acts for the establishment of:**
 - **Austrian Research Promotion Agency** (Österreichische Forschungsförderungsgesellschaft mbH-Errichtungsgesetz - FFG-G)
 - **Climate and Energy Fund** (Klima- und Energiefondsgesetz)
 - **Nationalstiftung für Forschung Technologie und Entwicklung** (FTE-Nationalstiftungsgesetz)
 - **Austria Wirtschaftsservice** (Austria Wirtschaftsservice-Gesetz)

- ✓ **Research and Technology Promotion Act** (Forschungs- und Technologieförderungsgesetz **(FTF-G)**)
- ✓ **Framework Directives for the Provision of Federal State Grants** (die Allgemeinen Rahmenrichtlinien für die Gewährung von Förderungen aus Bundesmitteln **(ARR 2014)**)
- ✓ **Research Organisation Act** (das Forschungsorganisationsgesetz **(FOG; Berichtswesen: §§ 6-9)**)
- ✓ **Directives on Research Funding and Funding of Economical and Technical Research, Technology Development and Innovation** (FTI-Richtlinien: Themen-FTI-Richtlinie, Struktur-FTI-Richtlinie, Humanressourcen-FTI-Richtlinie) **(BMFWF / BMVIT (2017))**
- ✓ **Directives for Funding of Research and Innovation projects of the Austrian Research Promotion Agency** (Richtlinien für die Förderung von Forschungs- und Innovationsprojekten der FFG / FFG-Richtlinien)
- ✓ **Seedfinancing Directive 2016** (Seedfinancing Richtlinie 2016)
- ✓ **Special Directives:**
 - AplusB – Sonderrichtlinien
 - Frontrunner Sonderrichtlinien (aws)
 - Innovationsscheck - Sonderrichtlinien (BMVIT)

8 Good practice examples

Box 1

Mycoplasma Biosafety Services

- **Company:** Mycoplasma Biosafety Services GmbH
- **CF platform used:** www.greenrocket.com
- **Topic:** health / pharmaceutical
- **Amount of money raised:** EUR 153.100



Source: www.greenrocket.com

Short description

The project will support mycoplasma testing. According to international regulations, the absence of mycoplasma bacteria has to be confirmed in a large number of medicines as their presence could affect the medicine production and the health of humans and animals. The project aims at development, production and distribution of specific products for the tests.

Mycoplasma Biosafety is a bio-tech company and a supplier mycoplasma testing and related services and products. Its combination of scientific knowledge and industrial usable products promise development and expansion potential.

Recent influence

Pharmaceutical industries use the know-how of the company. Company expansion and science development.

Box 2

Matt Bee Honey

- **Company:** Matt Bee Honey
- **CF platform used:** www.startnext.com
- **Topic:** environment / food
- **Amount of money raised:** EUR 2,226



Source: www.mattbee.at

Short description

It connects the idea for a cooperative agriculture with crowdfunding. The investment aims at increase in the number of bee colonies of the company and the investors receive natural bio honey produced by the company.

Recent influence

Increase of the bee population in the region; example of a shared economy

Box 3

Neovoltaic

- **Company:** Neovoltaic AG
- **CF platform used:** www.conda.eu
- **Topic:** energy / renewables
- **Amount of money raised:** EUR 680,600



Source: www.conda.eu

Short description

An all-in one solution for the private power supply: the customer becomes a prosumer and generates the energy one needs and spends for him or herself. Neovoltaic offers 4 different product packages together with expert advice on this topic.

Recent influence

Increase in the use of renewables

Box 4

Schlossalm neu

- **Company:** Gasteiner Bergbahnen AG
- **CF platform used:** www.1000x1000.at
- **Topic:** construction / leisure
- **Amount of money raised:** EUR 1.6 million



Source: www.1000x1000.at

Short description

Modernization of ski lift and tracks in the ski area of Schlossalm. Investors receive discounts on vouchers for the ski lift use during the winter and summer season.

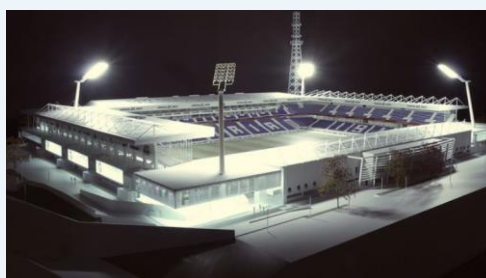
Recent influence

Supporting the company development and attracting tourists in the region.

Box 5

Arena Baumeister

- **Company:** FK Austria Wien AG
- **CF platform used:** www.violacrowd.at
- **Topic:** construction / sport / leisure
- **Amount of money raised:** EUR 274.614



Source: www.violacrowd.at

Short description

Stadium modernization belonging to an Austrian football club. Investor receive, for example, their name shield in the stadium, special tickets and special tours.

Recent influence

Supporting the company development and attracting tourists in the region.

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