КРМС

Alternative Lending Index

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Spring 2017

Introduction

Background of alternative lending in Europe

- Alternative lending or non-bank lending is a term used to describe a range of borrowing alternatives available to consumers and businesses in addition to traditional bank loans. These alternative options are commonly used when traditional bank loans are not available to an individual or a business for a variety of reasons.
- Alternative lending demonstrated remarkable growth in Europe after the financial crisis of 2008, when the conventional way of financing via banks became more stringent for both households and businesses.
- In addition, in recent years the alternative lending industry has evolved into online alternative lending involving peer-to-peer (P2P) lending platforms - marketplaces for loans issued by alternative lenders. The use of P2P platforms enables alternative lenders to generate extra financing for further expansion of the industry.
- Although the alternative lending market is growing rapidly and gaining significance in the household and small and medium business sector, to date there has been no unified supervising body, regulation or framework for operations of the alternative lending sector. The ECB acknowledges the existence of the alternative lending market, but does not intend to monitor its development closely due to its insignificant volume compared to the traditional lending, at least for the time being.

European Alternative Lending Index

- In the absence of official industry metrics, Alternative Lending Index has been developed in cooperation between TWINO and KPMG to compare the lending environment across European countries highlighting economies with favourable environments for expansion of the alternative lending market.
- Please note that the index focuses exclusively on the lending environment in each respective country and does not take into consideration regulation, although, clearly, regulation directly impacts the development of the alternative lending market in the given country.
- We also acknowledge that the index would change over time along with changes in the components the index is built on. Therefore we intend to update this study to highlight key changes across European countries.

Methodology

- We have gathered comparable data on 23 countries in Europe regarding the general lending environment (4 components) and specific lending conditions for households or businesses (5 components). Alternative Lending Index is comprised of 9 components that are equally weighted to arrive at the overall country index. Please refer to Annex 1 for the detailed method.
- The results are graded in the index on the scale from 0 to 10, where a higher value applies to a country with a more favourable environment for the expansion of alternative lending. As such, the index is higher for countries that have a higher credit gap, lower probability of obtaining a loan or more stringent loan issuance criteria in other words, where the alternative lending can fill the current credit gap and other inefficiencies in the lending market.
- Our research does not include the following European countries that currently lack publicly accessible comparable data: Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Iceland, Luxembourg, Macedonia, Malta, Moldova, Norway, Serbia, Switzerland.

Data sources

- Our analysis is based on the following main data sources:
 - Periodic publications by the European Central Bank on credit gap, statistics on the number of credit institutions, the amount of household credit per capita and outstanding loans to non-financial corporations.
 - Eurostat statistics on employment in financial services, cost of borrowing for households and businesses;
 - Doing business index for Getting credit index.
- For countries that are not members of the Economic and Monetary Union of the European Union or the Euro area, we have collected data from central banks of the respective countries, where these were available.
- Data for each of the countries in this is publication is presented as at 31 December 2016, unless stated otherwise.



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Executive summary

Top countries in Alternative Lending Index

- The highest ranked countries for alternative lending in Europe are: Hungary, Slovenia, Latvia, Poland, Romania, Greece and Ireland. These countries have the highest potential for the development of alternative lending in Europe building on the current gaps and inefficiencies in the traditional lending market.
- The 5 countries with highly efficient lending markets that leave little room for alternative lenders are: France, Germany, Netherlands, Austria, Finland and Sweden. In these countries the existing sources of financing available to households and corporate borrowers are sufficient and the potential for the development of alternative lending is considered to be relatively low.

Countries with the highest Alternative Lending Index and Ioan volume

- By combining the results of Alternative Lending Index with the overall lending market size in the country included in the sample, we highlight the countries with the highest market potential for alternative lending that offer high growth opportunities in both relative and absolute terms.
- Countries with the highest market potential in terms of both the size of the overall lending market and the alternative lending environment are: Poland, Greece and Ireland.
- The closest runner-up countries with smaller lending markets include Hungary, Slovenia, Latvia and Romania.

Large differences between households and businesses

- Comparing the availability of financing to households and businesses some countries show significant differences between the two. The indices of businesses for Estonia, Hungary, Italy and Netherlands are at least 2 index points lower than those of households, implying that there is more room for alternative lending to households.
- On the contrary, the business lending index for the UK is significantly higher than that for the household borrowers, implying that it is easier for a household to receive a loan compared to corporate borrowers.

Key highlights on individual countries

- The credit gap for the United Kingdom and France is negative, which indicates that the lending demand in these countries is met with a surplus.
- As concerns the size of the lending market, the leader is Germany with the total outstanding loans of EUR 2.5 trillion, followed by France with outstanding loans amounting to EUR 2.1 trillion. Germany is also the leader in the number of credit institutions, with 1 694 credit institutions being located in Germany, which accounts for approximately 34% of the total number of credit institutions in the Euro area.
- Ireland (78 institutions) is the top country by the number of credit institutions per 1 million inhabitants, with the nearest following countries Austria and Finland following behind with 70 and 50 institutions, respectively.
- The Swedish households and businesses can borrow at the lowest interest rates in Europe concurring with the fact that Swedish households are also the most indebted.

European lending market highlights 2010-2016

- The aggregate European credit gap has increased by 12 percentage points compared to 2010. In nominal terms, the credit gap reached EUR 410 billion at the end of the third quarter of 2016 implying there are development opportunities for alternative lenders.
- During 2010-2016 the total density of credit institutions per 1 million inhabitants decreased from 19 in 2010 to 15 in 2016. At the same time, the cost of borrowing for household and businesses has been decreasing over time.

Regulatory highlights

- The approach to regulation depends on the maturity of the alternative lending industry in each jurisdiction. As suggested by Clifford and Chance (April, 2017), the alternative lending industry in the future will continue to grow and become more unified across Europe, we will see more proactive regulation on a local level, in part driven by alternative lenders themselves but also other participants of the market.



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Executive summary

Alternative Lending Index 2016 (2/2)

Countries with the highest potential for development of alternative lending based on lending environment and market size

Alternative Lending Index and market size matrix



Favourable environment for growth of the alternative lending industry:

- Poland, Greece and Ireland that have a high Alternative Lending Index and medium sized markets can be seen as the countries with the highest potential for the growth of the alternative lending industry;
- Top countries by Alternative Lending Index including Hungary, Slovenia, Latvia, and Romania have a high potential for growth of alternative lending, but these are economies with comparably low volumes of loans;
- The other group of countries with a high potential for the development of alternative lending are Italy, Spain and UK, which have a medium Alternative Lending Index and a large market size.
- **Countries with a less favourable alternative lending environment**: France, Germany, the Netherlands, Sweden, Austria and Finland all feature an efficient traditional lending environment with less room for the development of alternative lending, although these are large markets.

Note: Please see the volume of household and business loans in detail in Annex 3

Poland, Greece and Ireland - countries with high Alternative Lending Index and a medium volume of loans have favourable opportunities for expansion of alternative lending.



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Executive summary European lending environment 2010-2016

Getting Credit Index



Credit Gap

(Aggregate credit gap, in billions EUR and as % of GDP)



KPMG, using individual values

Cost of borrowing for households and businesses

(Interest rate on loans to non financial corporations, consumption and mortgage loans for households, annual percentage rate of charge)





Indebtedness of businesses

(Total loans to non financial corporations / gross domestic product)



Indebtedness of households

(Total household loans per capita / Annual income per capita, percent)





Density of credit institutions



Better general lending environment means worse opportunities for alternative lending



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(Number of credit institutions per 1 million inhabitants)

КРМС Alternative Lending Index by individual countries

the state of the state of







General lending environment

(Source: Doing Business Index, Eurostat)

55

Euro Area

Employment in financial

Getting Credit Index

(Score from 0-100)

60

Austria

Credit Gap

(Aggregate credit gap, in billions EUR and as % of GDP)





Indebtedness

(Source: ECB, Eurostat)

(Total loans to non financial

Indebtedness of businesses

corporations / gross domestic product)

Indebtedness of households

(Total household loans per capita /



Cost of borrowing

(Source: ECB, Eurostat)

Cost of borrowing for businesses

(Interest rate on loans to non financial corporations, annual percentage rate of charge)



Cost of borrowing for households





services (Employed in financial services as % of total employment)





15

Euro area

70

Austria

Density of credit institutions

Annual income per capita, percent)



Cost of borrowing on mortgages (households)



(Interest rate on mortgage loans to



The general lending environment in Austria is well developed and it has the second highest density of credit institutions in Europe. Due to a relatively low cost of borrowing the indebtedness of households and businesses is above the Euro area average.



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General lending environment

(Source: Doing Business Index, Eurostat)

55

Euro Area

Employment in financial

(Employed in financial services

as % of total employment)

Getting Credit Index

(Score from 0-100)

45

Belgium

services



(Aggregate credit gap, in billions EUR and as % of GDP)





Indebtedness

(Source: ECB, Eurostat)

(Total loans to non financial

Indebtedness of businesses

corporations / gross domestic product)

Indebtedness of households

(Total household loans per capita /

Annual income per capita, percent)

Density of credit institutions

(Number of credit institutions per 1 million inhabitants)







Cost of borrowing

(Source: ECB, Eurostat)

Cost of borrowing for businesses

(Interest rate on loans to non financial corporations, annual percentage rate of charge)



Cost of borrowing for households

(Interest rate on consumption loans to households, annual percentage rate of charge)



Cost of borrowing on mortgages (households)



(households) (Interest rate on mortgage loans to households, annual percentage rate of charge)

Alternative Lending Index in Belgium is lower than the Euro area average as its credit gap is low and the cost of borrowing is lower than in the Euro area.



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TWINO Alternative Lending Index Czech Republic





General lending environment

(Source: Doing Business Index, Eurostat)

55

Euro Area

Employment in financial

(Employed in financial services

as % of total employment)

Getting Credit Index

(Score from 0-100)

70

Czech

Republic

services

Credit Gap

(Aggregate credit gap, in billions EUR and as % of GDP)



Density of credit institutions

(Number of credit institutions per 1 million inhabitants)







(Source: ECB, Eurostat)

Indebtedness of businesses

(Total loans to non financial corporations / gross domestic product)



Indebtedness of households

(Total household loans per capita / Annual income per capita, percent)



Cost of borrowing

(Source: ECB, Eurostat)

Cost of borrowing for businesses

(Interest rate on loans to non financial corporations, annual percentage rate of charge)



Cost of borrowing for households

(Interest rate on consumption loans to households, annual percentage rate of charge)



Cost of borrowing on mortgages (households)

annual percentage rate of charge) 4% 2%

(Interest rate on mortgage loans to households,

Dec 2016 Jan 2014 Czech Republic Euro area

Credit is generally easy accessible and the cost of borrowing converges with the average of the Euro area, although, the indebtedness of Czech borrowers remains below the average.



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General lending environment

(Source: Doing Business Index, Eurostat)

55

Euro Area

Getting Credit Index

(Score from 0-100)

70

Denmark

Credit Gap

(Aggregate credit gap, in billions EUR and as % of GDP)



Density of credit institutions

(Number of credit institutions

per 1 million inhabitants)



Indebtedness

(Source: ECB, Eurostat)

(Total loans to non financial

Indebtedness of businesses

corporations / gross domestic product)

Indebtedness of households

(Total household loans per capita / Annual income per capita, percent)



Cost of borrowing

(Source: ECB, Eurostat)

Cost of borrowing for businesses

(Interest rate on loans to non financial corporations, annual percentage rate of charge)



Cost of borrowing for households

charge)



(Interest rate on consumption loans to households, annual percentage rate of



(Employed in financial services as % of total employment)







Cost of borrowing on mortgages (households) (Interest rate on mortgage loans to households,



Denmark has a relatively highly developed lending environment, although the credit gap in the economy implies there are opportunities for alternative lending as the indebtedness of households and businesses is well below the Euro area average.



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General lending environment

(Source: Doing Business Index, Eurostat)

Getting Credit Index

(Score from 0-100)

Credit Gap

11.8%

(Aggregate credit gap, in billions EUR and as % of GDP)



Employment in financial

(Employed in financial services

1.80%

Euro area

as % of total employment)

services

1.22%

Estonia



Density of credit institutions

15

Euro area

(Number of credit institutions

per 1 million inhabitants)

27

Estonia



Indebtedness

(Source: ECB, Eurostat)

(Total loans to non financial

Indebtedness of businesses

corporations / gross domestic product)

Indebtedness of households

(Total household loans per capita / Annual income per capita, percent)



Cost of borrowing

(Source: ECB, Eurostat)

Cost of borrowing for businesses

(Interest rate on loans to non financial corporations, annual percentage rate of charge)



Cost of borrowing for households

(Interest rate on consumption loans to households, annual percentage rate of charge)



Cost of borrowing on mortgages (households)

annual percentage rate of charge) 6% 4% 2% Jan 2014 Dec 2016 Estonia -Euro area

(Interest rate on mortgage loans to households,

Access to credit and the density of credit institutions is relatively high in Estonia, resulting in one of the best lending environments in Europe. The cost of borrowing for households remains higher than the Euro area average.



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General lending environment

(Source: Doing Business Index, Eurostat)

55

Euro Area

Getting Credit Index

(Score from 0-100)

65

Finland

services

(Aggregate credit gap, in billions EUR and as % of GDP)

Credit Gap



(Source: ECB, Eurostat) Indebtedness of businesses

Indebtedness

(Total loans to non financial corporations / gross domestic product)



Indebtedness of households

(Total household loans per capita / Annual income per capita, percent)



Cost of borrowing

(Source: ECB, Eurostat)

Cost of borrowing for businesses

(Interest rate on loan to non financial corporations, annual percentage rate of charge)



Cost of borrowing for households

households, annual percentage rate of charge)



(Interest rate on consumption loan to



(Number of credit institutions

(Employed in financial services as % of total employment)

Employment in financial





per 1 million inhabitants)



Cost of borrowing on mortgages (households)



(Interest rate on mortgage loans to households, annual percentage rate of charge)

Historically low cost of borrowing for households and businesses has led to relatively high levels of indebtedness in Finland. Finland has one of the best general lending environments in Europe



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Indebtedness

(Source: ECB, Eurostat)

(Total loans to non financial

Indebtedness of businesses

corporations / gross domestic product)

40.0%

Euro area

(Total household loans per capita /

Annual income per capita, percent)



General lending environment

(Source: Doing Business Index, Eurostat)

55

Euro Area

Getting Credit Index

(Score from 0-100)

50

France

services

Credit Gap

(Aggregate credit gap, in billions EUR and as % of GDP)





Density of credit institutions Indebtedness of households

(Number of credit institutions per 1 million inhabitants)



Employment in financial

(Employed in financial services

as % of total employment)





Cost of borrowing

(Source: ECB, Eurostat)

Cost of borrowing for businesses

(Interest rate on loans to non financial corporations, annual percentage rate of charge)



Cost of borrowing for households

(Interest rate on consumption loans to households, annual percentage rate of charge)



Cost of borrowing on mortgages (households)



France is one of the 2 countries with a negative credit gap and a higher than average indebtedness of households and businesses. Surprisingly, its scores below the average in the Getting Credit Index.



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General lending environment

(Source: Doing Business Index, Eurostat)

Getting Credit Index

(Score from 0-100)

Credit Gap

6.4%

(Aggregate credit gap, in billions EUR and as % of GDP)



Employment in financial

(Employed in financial services

as % of total employment)

services



Density of credit institutions

(Number of credit institutions

per 1 million inhabitants)



Indebtedness

(Source: ECB, Eurostat)

(Total loans to non financial

Indebtedness of businesses

corporations / gross domestic product)

Indebtedness of households

(Total household loans per capita / Annual income per capita, percent)



Cost of borrowing

(Source: ECB, Eurostat)

Cost of borrowing for businesses

(Interest rate on loans to non financial corporations, annual percentage rate of charge)



Cost of borrowing for households

(Interest rate on consumption loans to households, annual percentage rate of charge)



Cost of borrowing on mortgages

1.80% 1.80% Germany Euro area





(households)



(Interest rate on mortgage loans to households,

The German lending market is largely self sufficient and meets the domestic credit demand. The cost of borrowing is at the Euro area level for households and businesses and below the Euro area for mortgages.



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General lending environment

(Source: Doing Business Index, Eurostat)

Getting Credit Index

(Score from 0-100)

Credit Gap

(Aggregate credit gap, in billions EUR and as % of GDP)



Employment in financial

(Employed in financial services

1.80%

Euro area

as % of total employment)

services

1.74%

Greece



Density of credit institutions

Euro area

(Number of credit institutions

per 1 million inhabitants)

3

Greece

16.6%



Indebtedness

(Source: ECB, Eurostat)

(Total loans to non financial

Indebtedness of businesses

corporations / gross domestic product)

Indebtedness of households

(Total household loans per capita / Annual income per capita, percent)



Cost of borrowing

(Source: ECB, Eurostat)

Cost of borrowing for businesses

(Interest rate on loans to non financial corporations, annual percentage rate of charge)



Cost of borrowing for households

(Interest rate on consumption loans to households, annual percentage rate of charge)



Cost of borrowing on mortgages (households)



(Interest rate on mortgage loans to households, annual percentage rate of charge)

Greek businesses maintain a high level of indebtedness in the presence of a relatively high cost of borrowing. The estimated credit gap is growing constantly resulting in a high Alternative Lending Index.



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General lending environment

(Source: Doing Business Index, Eurostat)

Getting Credit Index

(Score from 0-100)

75 55 Hungary Euro Area

Employment in financial

(Employed in financial services

as % of total employment)

services



(Aggregate credit gap, in billions EUR and

Density of credit institutions

(Number of credit institutions per 1 million inhabitants)

Credit Gap

as % of GDP)

Indebtedness of households

Hungary Euro area

Indebtedness

(Source: ECB, Eurostat)

(Total loans to non financial

17.0%

Indebtedness of businesses

corporations / gross domestic product)

40.0%

(Total household loans per capita / Annual income per capita, percent)







Cost of borrowing

(Source: ECB, Eurostat)

Cost of borrowing for businesses

(Interest rate on loans to non financial corporations, annual percentage rate of charge)



Cost of borrowing for households

(Interest rate on consumption loans to households, annual percentage rate of charge)



Cost of borrowing on mortgages (households)

(Interest rate on mortgage loans to households, annual percentage rate of charge)

* Data not available

Hungary has a high Alternative Lending Index, as the indebtedness of households and businesses is significantly below the Euro area average, and the cost of borrowing for households is more than 3 times higher than that in the Euro area.



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General lending environment

(Source: Doing Business Index, Eurostat)

Getting Credit Index

(Score from 0-100)





60

50

40

30

20

10

(Aggregate credit gap, in billions EUR and as % of GDP)

25.9%



Indebtedness

(Source: ECB, Eurostat)

(Total loans to non financial

Indebtedness of businesses

corporations / gross domestic product)

Employment in financial services

(Employed in financial services as % of total employment)



Density of credit institutions

15

Europe

(Number of credit institutions per 1 million inhabitants)

78

Ireland

Q4 15 Q1 16



30.6

(Total household loans per capita / Annual income per capita, percent)

Indebtedness of households



Cost of borrowing

(Source: ECB, Eurostat)

Cost of borrowing for businesses

(Interest rate on loans to non financial corporations, annual percentage rate of charge)



Cost of borrowing for households

(Interest rate on consumption loans to households, annual percentage rate of charge)



Cost of borrowing on mortgages (households)

annual percentage rate of charge) 6% 4% 2% Jan 2014 Dec 2016 Ireland Euro area

(Interest rate on mortgage loans to households,





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General lending environment

(Source: Doing Business Index, Eurostat)

Getting Credit Index

(Score from 0-100)

Credit Gap

(Aggregate credit gap, in billions EUR and as % of GDP)



Employment in financial

(Employed in financial services

1.80%

Euro area

as % of total employment)

services

1.76%

Italy



Density of credit institutions

15

Euro area

(Number of credit institutions

per 1 million inhabitants)

10

Italy



Indebtedness of households

(Total household loans per capita / Annual income per capita, percent)



Cost of borrowing

(Source: ECB, Eurostat)

Cost of borrowing for businesses

(Interest rate on loans to non financial corporations, annual percentage rate of charge)



Cost of borrowing for households

(Interest rate on consumption loans to households, annual percentage rate of charge)



Cost of borrowing on mortgages (households)

annual percentage rate of charge) 6% 4% 2% Dec 2016 Jan 2014 - Italy -- Euro area

(Interest rate on mortgage loans to households,



KPMG

(Source: ECB, Eurostat) Indebtedness of businesses

(Total loans to non financial

corporations / gross domestic product)

Indebtedness







General lending environment

(Source: Doing Business Index, Eurostat)

Getting Credit Index

(Score from 0-100)







31.6%



Indebtedness

(Source: ECB, Eurostat)

(Total loans to non financial

Indebtedness of businesses

corporations / gross domestic product)

Density of credit institutions Indebtedness of households

(Total household loans per capita / Annual income per capita, percent)



Cost of borrowing

(Source: ECB, Eurostat)

Cost of borrowing for businesses

(Interest rate on loans to non financial corporations, annual percentage rate of charge)



Cost of borrowing for households

(Interest rate on consumption loans to households, annual percentage rate of charge)



Employment in financial services

(Employed in financial services as % of total employment)





(Number of credit institutions

per 1 million inhabitants)



Cost of borrowing on mortgages



(households) (Interest rate on mortgage loans to households,

annual percentage rate of charge)

Despite being one of the top countries as concerns the ease of obtaining a loan, the wide spread for the cost of borrowing for household consumption and the relatively low level of indebtedness combined with a significant credit gap results in a high Alternative Lending Index for Latvia.

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General lending environment

(Source: Doing Business Index, Eurostat)

55

Euro Area

Getting Credit Index

(Score from 0-100)

70

Lithuania

Credit Gap (Aggregate credit gap, in billions EUR and as % of GDP)



Density of credit institutions

(Number of credit institutions

per 1 million inhabitants)



Indebtedness

(Source: ECB, Eurostat)

(Total loans to non financial

Indebtedness of businesses

corporations / gross domestic product)

Indebtedness of households

(Total household loans per capita / Annual income per capita, percent)



Cost of borrowing

(Source: ECB, Eurostat)

Cost of borrowing for businesses

(Interest rate on loans to non financial corporations, annual percentage rate of charge)



Cost of borrowing for households

charge)



(Interest rate on consumption loans to households, annual percentage rate of



(Employed in financial services as % of total employment)







Cost of borrowing on mortgages (households)



(Interest rate on mortgage loans to households,

Lithuania has a relatively efficient lending market, with the credit gap in 2016 decreasing from 13.2% to 6.4%. The cost of borrowing for household mortgages and businesses has been on a par with the average of the Euro area.



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TWINO Alternative Lending Index Netherlands





General lending environment

(Source: Doing Business Index, Eurostat)

Getting Credit Index

(Score from 0-100)

Credit Gap

21 5%

(Aggregate credit gap, in billions EUR and as % of GDP)



Employment in financial

(Employed in financial services

1.80%

as % of total employment)

Netherlands Euro area

services

1.69%



Density of credit institutions

15

(Number of credit institutions

per 1 million inhabitants)

6

Netherlands Euro area



Indebtedness

(Source: ECB, Eurostat)

(Total loans to non financial

Indebtedness of businesses

corporations / gross domestic product)

Indebtedness of households

(Total household loans per capita / Annual income per capita, percent)



Cost of borrowing

(Source: ECB, Eurostat)

Cost of borrowing for businesses

(Interest rate on loans to non financial corporations, annual percentage rate of charge)



Cost of borrowing for households

(Interest rate on consumption loans to households, annual percentage rate of charge)



Cost of borrowing on mortgages (households)



(Interest rate on mortgage loans to households,

The relatively high level of indebtedness of households and businesses as well as the relatively low cost of borrowing results in an overall low Alternative Lending Index, despite the high credit gap estimated by the ECB.



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General lending environment

(Source: Doing Business Index, Eurostat)

55

Euro Area

Employment in financial

(Employed in financial services

1.80%

Euro area

as % of total employment)

Getting Credit Index

(Score from 0-100)

75

Poland

services

1.61%

Poland

Credit Gap (Aggregate credit gap, in billions EUR and

12

10

8 6.3

6

Δ

as % of GDP) 6.3% 6.1%

6.1

Density of credit institutions

15

Euro area

(Number of credit institutions

per 1 million inhabitants)

16

Poland



Indebtedness of households

Indebtedness

(Source: ECB, Eurostat)

(Total loans to non financial

Indebtedness of businesses

corporations / gross domestic product)

(Total household loans per capita / Annual income per capita, percent)



Cost of borrowing

(Source: ECB, Eurostat)

Cost of borrowing for businesses

(Interest rate on loans to non financial corporations, annual percentage rate of charge)



Cost of borrowing for households

(Interest rate on consumption loans to households, annual percentage rate of charge)



Cost of borrowing on mortgages (households)

(Interest rate on mortgage loans to households, annual percentage rate of charge)



Poland is an attractive lending market with a high Alternative Lending Index due to the low level of indebtedness of households and businesses as well as a higher cost of borrowing compared to the Euro area average.



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General lending environment

(Source: Doing Business Index, Eurostat)

Getting Credit Index

(Score from 0-100)

Credit Gap

(Aggregate credit gap, in billions EUR and as % of GDP)



Employment in financial

(Employed in financial services

1.80%

as % of total employment)

Portugal Euro area

services

1.73%



Density of credit institutions

15

Euro area

(Number of credit institutions

per 1 million inhabitants)

14

Portugal



Indebtedness

(Source: ECB, Eurostat)

(Total loans to non financial

Indebtedness of businesses

corporations / gross domestic product)

Indebtedness of households

(Total household loans per capita / Annual income per capita, percent)



Cost of borrowing

(Source: ECB, Eurostat)

Cost of borrowing for businesses

(Interest rate on loans to non financial corporations, annual percentage rate of charge)



Cost of borrowing for households

(Interest rate on consumption loans to households, annual percentage rate of charge)





Cost of borrowing on mortgages (households)

annual percentage rate of charge) 6% 4%



(Interest rate on mortgage loans to households,



The large credit gap and a slightly higher than the Euro area average cost of borrowing for households and businesses have resulted in an index being higher than the European average.



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General lending environment

(Source: Doing Business Index, Eurostat)

Getting Credit Index

(Score from 0-100)



Credit Gap





Density of credit institutions

(Number of credit institutions

per 1 million inhabitants)



Indebtedness

(Source: ECB, Eurostat)

(Total loans to non financial

Indebtedness of businesses

corporations / gross domestic product)

Indebtedness of households

(Total household loans per capita /

Annual income per capita, percent)

Employment in financial services

(Employed in financial services as % of total employment)







Cost of borrowing

(Source: ECB, Eurostat)

Cost of borrowing for businesses

(Interest rate on loans to non financial corporations, annual percentage rate of charge)



Cost of borrowing for households

(Interest rate on consumption loans to households, annual percentage rate of charge)



Cost of borrowing on mortgages (households)



- Romania ----- Euro area

Dec 2016

Jan 2014

(Interest rate on mortgage loans to households, annual percentage rate of charge)

Due to its low level of indebtedness of household and corporate borrowers, as well as a higher than the average cost of borrowing Romania has a high Alternative Lending Index. This is notwithstanding the top rank in Getting Credit index.



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General lending environment

(Source: Doing Business Index, Eurostat)

Getting Credit Index

(Score from 0-100)

65 55 Slovakia Euro Area

Employment in financial

(Employed in financial services

1.80%

Euro area

as % of total employment)

services

1.13%

Slovakia



Density of credit institutions

15

Euro area

(Number of credit institutions

per 1 million inhabitants)

5

Slovakia

(Aggregate credit gap, in billions EUR and

7.5%

Credit Gap

as % of GDP)



Indebtedness

(Source: ECB, Eurostat)

(Total loans to non financial

Indebtedness of businesses

corporations / gross domestic product)

Indebtedness of households

(Total household loans per capita / Annual income per capita, percent)



Cost of borrowing

(Source: ECB, Eurostat)

Cost of borrowing for businesses

(Interest rate on loans to non financial corporations, annual percentage rate of charge)



Cost of borrowing for households

(Interest rate on consumption loans to households, annual percentage rate of charge)



Cost of borrowing on mortgages (households)



(Interest rate on mortgage loans to households,

The spread between the cost of borrowing for households and businesses with the rest of the Euro area has decreased in the recent years, resulting in a low Alternative Lending Index for Slovakia.



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General lending environment

(Source: Doing Business Index, Eurostat)

55

Getting Credit Index

(Score from 0-100)

35

Slovenia

Credit Gap

(Aggregate credit gap, in billions EUR and as % of GDP)

Density of credit institutions

(Number of credit institutions

per 1 million inhabitants)





Indebtedness of households

Indebtedness

(Source: ECB, Eurostat)

(Total loans to non financial

Indebtedness of businesses

corporations / gross domestic product)

40.0%

(Total household loans per capita / Annual income per capita, percent)



Cost of borrowing

(Source: ECB, Eurostat)

Cost of borrowing for businesses

(Interest rate on loans to non financial corporations, annual percentage rate of charge)



Cost of borrowing for households

(Interest rate on consumption loans to households, annual percentage rate of charge)



Cost of borrowing on mortgages (households)



(Interest rate on mortgage loans to households, annual percentage rate of charge)

40% 30%



Employment in financial services

(Employed in financial services as % of total employment)







Dec 2016 Jan 2014 - Slovenia -- Euro area General difficulty to obtain a loan in Slovenia, a relatively low level of indebtedness of households and businesses as well as the low density of credit institutions are the main reasons for the high Alternative Lending Index for the country.



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General lending environment

(Source: Doing Business Index, Eurostat)

Getting Credit Index

(Score from 0-100)

Credit Gap

(Aggregate credit gap, in billions EUR and as % of GDP)





Density of credit institutions

53.8% 55.0% 54.8% 54.8%



Indebtedness

(Source: ECB, Eurostat)

(Total loans to non financial

Indebtedness of businesses

corporations / gross domestic product)

Indebtedness of households

(Total household loans per capita /

Annual income per capita, percent)

Employment in financial services

(Employed in financial services as % of total employment)









Cost of borrowing

(Source: ECB, Eurostat)

Cost of borrowing for businesses

(Interest rate on loans to non financial corporations, annual percentage rate of charge)



Cost of borrowing for households

(Interest rate on consumption loans to households, annual percentage rate of charge)



Cost of borrowing on mortgages (households)



(Interest rate on mortgage loans to households,

Alternative Lending Index of Spain is close to the average. Its enormous credit gap (the highest in Europe) is set back by already relatively high indebtedness of households and businesses as well as the relatively low cost of borrowing.



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General lending environment

(Source: Doing Business Index, Eurostat)

Getting Credit Index

(Score from 0-100)



Employment in financial

(Employed in financial services

as % of total employment)

services



14

12

10

8

6

4 2

(Aggregate credit gap, in billions EUR and as % of GDP)

7.6%

9.0%

9.4

7.9%

8.4

Q4 15 Q1 16 Q2 16 Q3 16



Indebtedness

(Source: ECB, Eurostat)

(Total loans to non financial

Indebtedness of businesses

corporations / gross domestic product)

Density of credit institutions

(Number of credit institutions per 1 million inhabitants)





Indebtedness of households

(Total household loans per capita / Annual income per capita, percent)



Cost of borrowing

(Source: ECB, Eurostat)

Cost of borrowing for businesses

(Interest rate on loans to non financial corporations, annual percentage rate of charge)



Cost of borrowing for households

(Interest rate on consumption loans to households, annual percentage rate of charge)



Cost of borrowing on mortgages (households)



(Interest rate on mortgage loans to households,

Sweden with its cost of borrowing below the Euro area average receives the lowest index and implies the lowest potential for development of the alternative lending market.



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TWINO Alternative Lending Index United Kingdom





General lending environment

(Source: Doing Business Index, Eurostat)

55

Euro Area

Employment in financial

(Employed in financial services

as % of total employment)

Getting Credit Index

(Score from 0-100)

75

United

Kingdom

services

Credit Gap

(Aggregate credit gap, in billions EUR and as % of GDP)



Density of credit institutions

(Number of credit institutions per 1 million inhabitants)







(Source: ECB, Eurostat)

Indebtedness of businesses

(Total loans to non financial corporations / gross domestic product)



Indebtedness of households

(Total household loans per capita / Annual income per capita, percent)



Cost of borrowing

(Source: ECB, Eurostat)

Cost of borrowing for businesses

(Interest rate on loans to non financial corporations, annual percentage rate of charge)



Cost of borrowing for households



United Kingdom Mar 2015 Euro area

Cost of borrowing on mortgages (households)

annual percentage rate of charge) 4% 2% Mar 2015 Dec 2016 United Kingdom Euro area

(Interest rate on mortgage loans to households,

In 2016 the UK closed its credit gap and reached a credit surplus of 4.3%. In the recent years the cost of borrowing in the UK has remained relatively close to the Euro area average, which has resulted in a medium Alternative Lending Index for the UK.



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Annex 1 Methodology (1 of 2)

Dimension	Variable	Form	Source
- Lending Environment	Credit Gap	Credit gap as % of total GDP	European Central Bank, Bank of International Settlements
	Employment in financial services	Employment in financial services / Total employment in the country, as %	Eurostat
	Getting Credit Index (0-100)	Getting Credit Index (0-100)	Doing Business Index
	Density of credit institutions	Number of credit institutions / Population in millions, as %	European Central Bank
- Indebtedness	Indebtedness of households	Total household credit per capita/Total annual net income per capita, as %	European Central Bank, Eurostat
	Indebtedness of businesses	Total corporate loans outstanding / GDP, as %	European Central Bank, Eurostat
- Households	Interest rate on consumption loans for households	Aggregate MFIs interest rate on new business, as %	Eurostat, Central Banks of respective countries
	Interest rate on mortgages	Aggregate MFIs interest rate on new business, as %	Eurostat, Central Banks of respective countries
	Cost of borrowing for businesses	Aggregate MFIs interest rate on new business, as %	Eurostat, Central Banks of respective countries

Note: MFIs - monetary financial institutions

- **General Lending Environment:** there are four variables to evaluate the general lending environment credit gap, employment in financial services as compared to total employment, getting credit index, and density of credit institutions.
 - Credit gap the variable is measured as per cent of GDP, in order not to account for the size of economy. Credit gap is calculated as the difference between actual loans to GDP ratio and the long term trend of loans to GDP ratio. The long term trend of loans to GDP ratio had been estimated by the European Central Bank and the Bank of International Settlements using The Hodrick-Prescott filter. The variable has a positive contribution to the index, meaning, the higher the credit gap in the country, the more underserved the market is.
 - Employment in financial services the variable is measured as the total employment in financial services divided by the total employment in the country. The variable has a positive relationship with the index, the higher the employment in the financial services, the more potential for the development of alternative lending.

- Getting credit index the variable is measured as an index between 0 and 100, with 100 indicating that credit is easily accessible in the country. Therefore, higher values have a negative contribution to Alternative Lending Index, indicating that the existing lending market is well developed.
- Density of credit institutions the variable is measured as the number of credit institutions in the country divided by total population (aged 15+). The variable has a negative effect on the Alternative Lending Index as the higher the number of credit institutions, the more difficult it is for new lenders to step in.
- Indebtedness: measures the debt burden of households and businesses.
 - Indebtedness of households the variable is measured as the total outstanding loans per capita at the end of the year divided by net annual income per capita. The variable contributes negatively to the index; the higher the indebtedness of households, the less additional borrowing they need.
 - Indebtedness of businesses the variable is measured as the total outstanding corporate loans at the end of the year divided by total annual gross domestic product. The variable contributes negatively to the index; higher indebtedness of businesses is associated with a higher leverage and lower demand for additional borrowing.



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Annex 1 Methodology (2 of 2)

- Cost of borrowing: is measured across three categories, indicating affordability of entities to offer alternative lending.
 - Interest rate on consumption loans the variable is measured as an annual percentage rate of charge on new issues of consumption loans. The variable has a positive effect on the index. The higher the interest rate on consumption loans, the more opportunities there are for alternative lenders to provide additional lending.
 - Interest rate on mortgages the variable is measured as an annual percentage rate of charge on new issues of mortgage loans. The variable also has a positive relationship with the index, meaning, the higher the interest rate, the more opportunities there are for alternative lenders to provide borrowing.
 - Interest rate on loans to non-financial institutions the variable is measured as an annual percentage rate of charge on new loan issues. The variable contributes positively to the index, meaning, the higher the interest rate, the more underserved the market is, implying there is potential for alternative lenders to provide additional loans.

Limitations of the research: KPMG acknowledges that this research may not completely represent the actual market situation and the following aspects should be taken into account when evaluating the results.

- **Regulatory aspects:** As indicated earlier in the research, regulation plays a crucial role in the lending market and may be the key aspect which explains the differences observed between the actual market situation and the results of this research. Many economies have not yet developed regulations for alternative lending, which makes these countries more attractive to alternative lenders than strictly regulated markets.
- **Omitted variable bias:** Apart from regulatory aspects, there are other factors in economies which may affect the results in one or the other way. Such factors could be competition between existing players, possibilities for recoverability in case of defaults, the role of debt market in the economy, economies' openness to foreign investors, future growth prospects of the country, political uncertainty and many more. These factors require qualitative evaluation rather than quantitative.



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Annex 2 Composition of Alternative Lending Index

Ranking	Country	Alternative Lending Index	General lending environment	Busines lending	Household lending
1	Hungary	6.6	4.8	7.1	9.8
2	Slovenia	5.9	6.8	5.5	4.8
3	Latvia	5.8	4.3	5.9	7.9
4	Poland	5.8	3.5	7.8	7.7
5	Romania	5.7	3.3	8.5	7.0
6	Greece	5.3	5.5	5.5	5.0
7	Ireland	5.2	5.2	5.9	4.7
8	Denmark	5.0	5.0	5.0	5.0
9	Portugal	4.9	6.6	3.7	3.3
10	Italy	4.3	5.7	1.7	4.2
11	Spain	4.3	6.3	1.8	3.2
12	Estonia	4.1	3.0	3.7	5.8
13	Czech Republic	4.0	3.3	4.8	4.5
14	Belgium	4.0	4.7	3.7	3.3
15	Lithuania	4.0	2.4	5.6	5.1
16	Slovakia	4.0	3.7	5.0	3.1
17	United Kingdom	4.0	3.6	5.6	3.3
18	France	3.6	5.0	1.5	3.1
19	Germany	3.3	3.6	3.7	2.7
20	Netherlands	3.3	5.5	0.1	2.4
21	Austria	2.8	2.9	1.6	3.
22	Finland	2.3	2.2	2.7	2.4
23	Sweden	2.1	3.9	1.0	0.5
ource: KPN	/G analysis	(4 components) (2 components	3 components





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individual components.

Annex 3 Total volume of outstanding loans

Total volume of household and business loans as at 31 December 2016



Note: Business loans - loans to non-financial corporations. Source: European Central Bank; KPMG analysis.

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