

Access to finance conditions of enterprises – a granular analysis of loan level data of the Albanian credit registry

FINANCIAL SECTOR DEVELOPMENT AND ACCESS TO FINANCE IN ALBANIA

Overview of the analysis conducted:

1. With granular loan data from the credit registry of the Bank of Albania, an analysis of access to finance conditions of enterprises by size and sector with focus on maturities, interest rates and other costs as well as collateral including guarantees.
2. The impact of a recent policy change which, starting from January 1, 2018, requires banks and other non-bank credit institutions to grant loans only based on tax-compliant statements. This might have significantly reduced the ability of MSMEs to attract lending in the short run, thereby limiting their growth potential.
3. Existing credit guarantee programs and their impact on loan conditions – based on available data from the credit registry.

1. An analysis of access to finance conditions of enterprises



BACKGROUND ON THE ALBANIAN CREDIT REGISTRY

- Established in 2008. As of today, all banks and other non-bank credit institutions licensed by the Bank of Albania report to the registry with institutions reporting gradually going up from 18 to 42 after 2014.
- The Credit Registry collects a detailed set of information on each loan including interest rates, maturity as well as pledged collateral as well as the providing financial institutions.
- The credit registry, however, does not collect financial information on firms nor on credit applications and rejections. The latter means that the credit registry will provide information only on realized/extended loans without being able to assess the actual demand on loans.

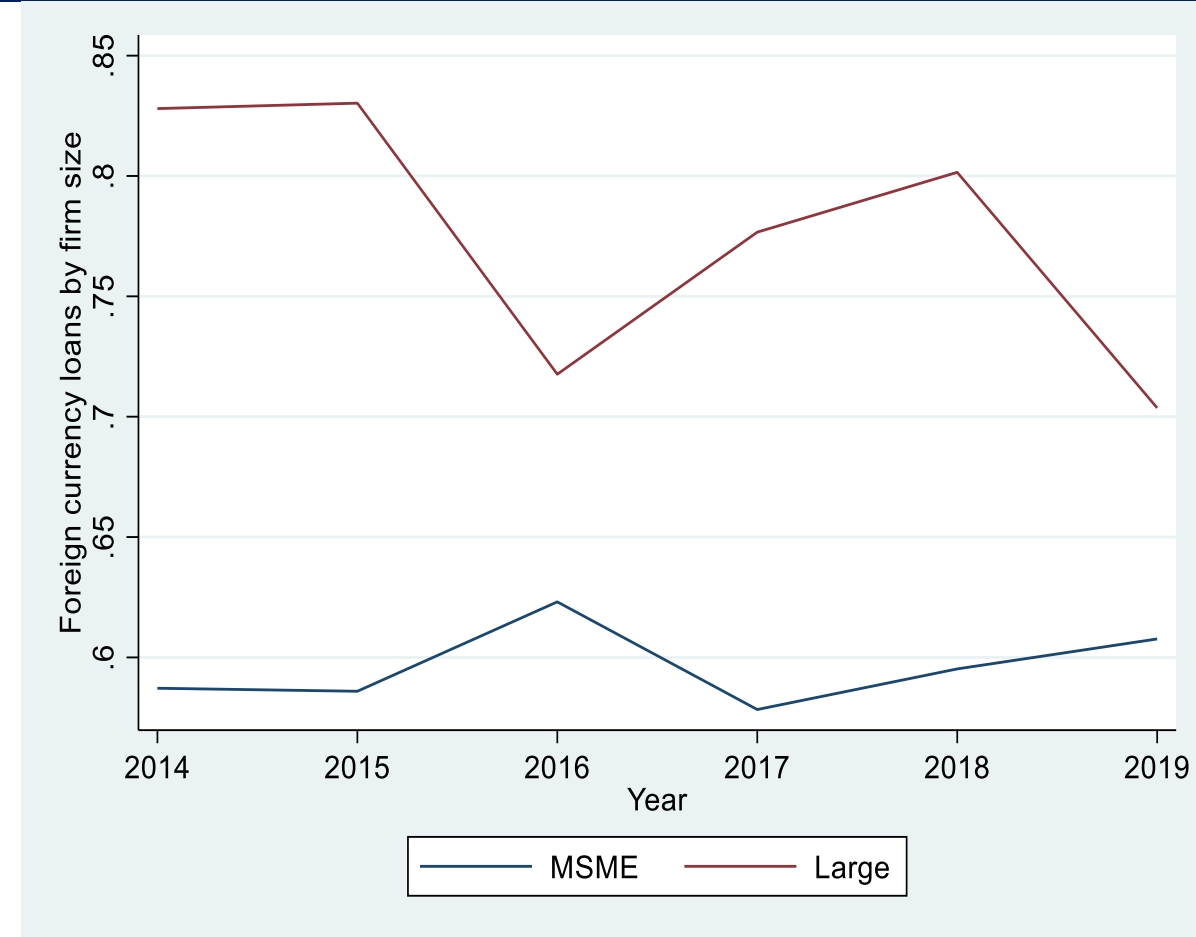
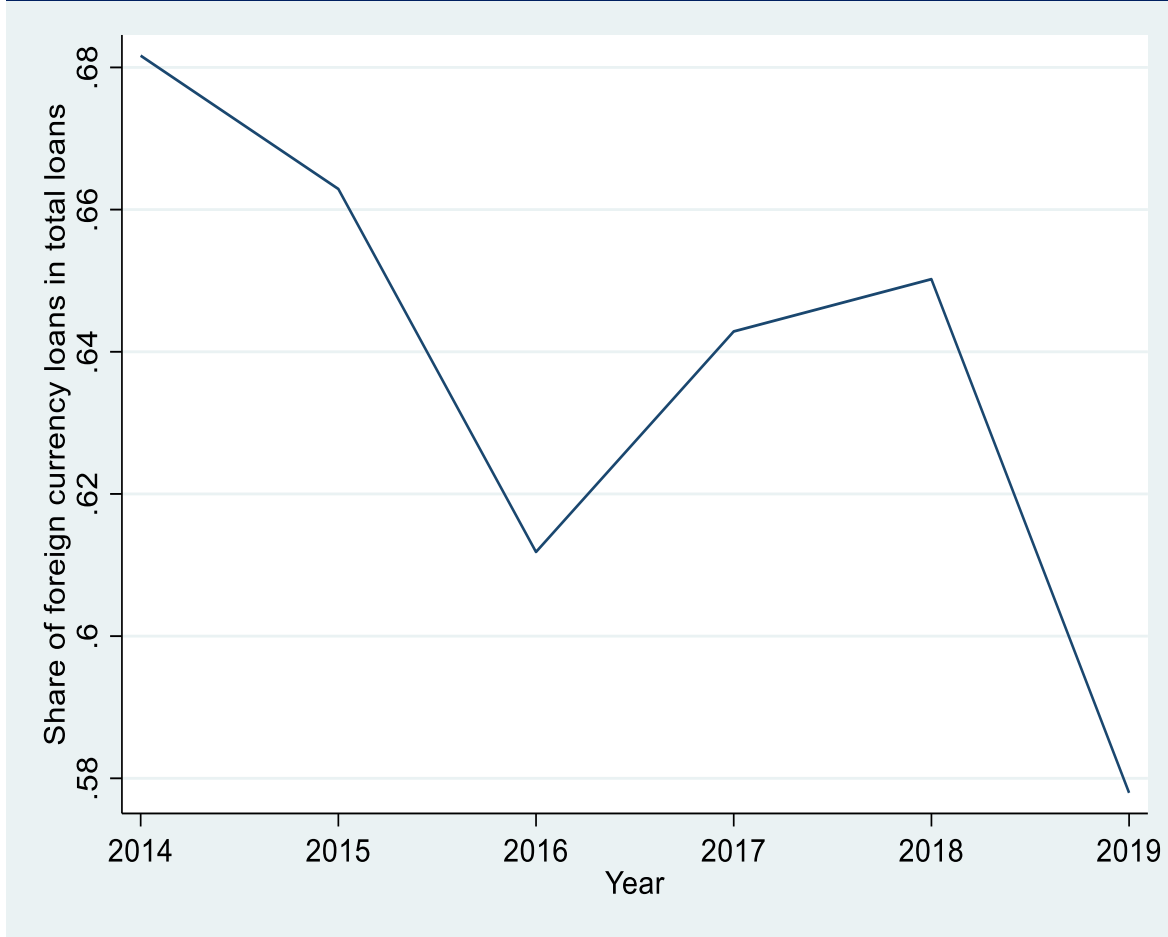
GRANULAR ANALYSIS OF LOAN LEVEL DATA OF THE ALBANIAN CREDIT REGISTRY

- 62,179 loans from 18,267 firms. Data from the Albanian Credit Registry is complemented by data from the Albanian National Business Center which allows to match loan level data with firms' financial information.
- Due to an increase in reporting institutions, the number of loans in the credit registry increases over the years but generally stabilizes after 2013.

Firm size		Assets (in LEK)	No of loans	Share of loans (%)	No of firms	Share of firms (%)
micro	less than	47,500,000	5,387	15.21	1,903	31.66
small	from -to	540,000,000	17,052	48.16	3,103	51.63
medium	from -to	2,700,000,000	9,788	27.65	842	14.01
large	over	2,700,000,000	3,179	8.98	162	2.70
		Total	35,406	100	6,010	100

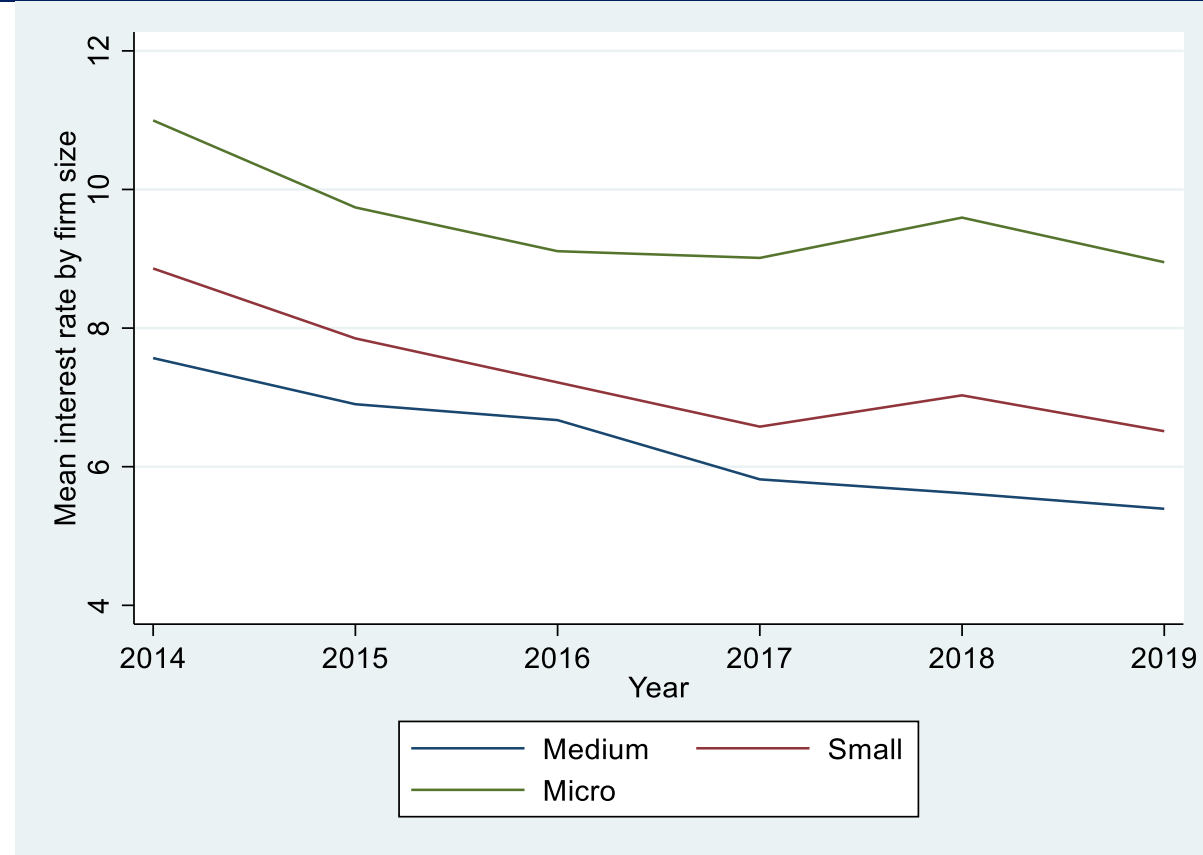
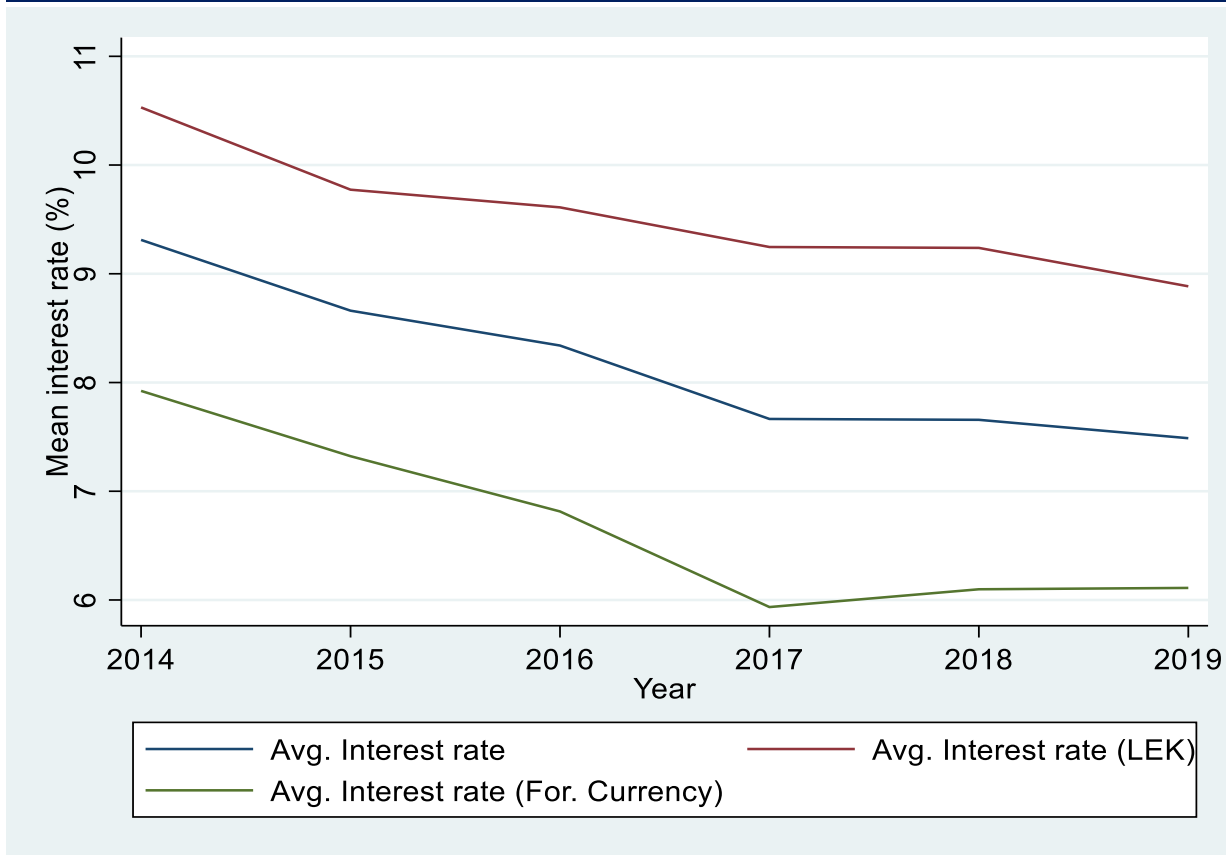
Firm size definitions and shares (Size categories follow the EU definition for firms' total asset size.)

Currency Denomination



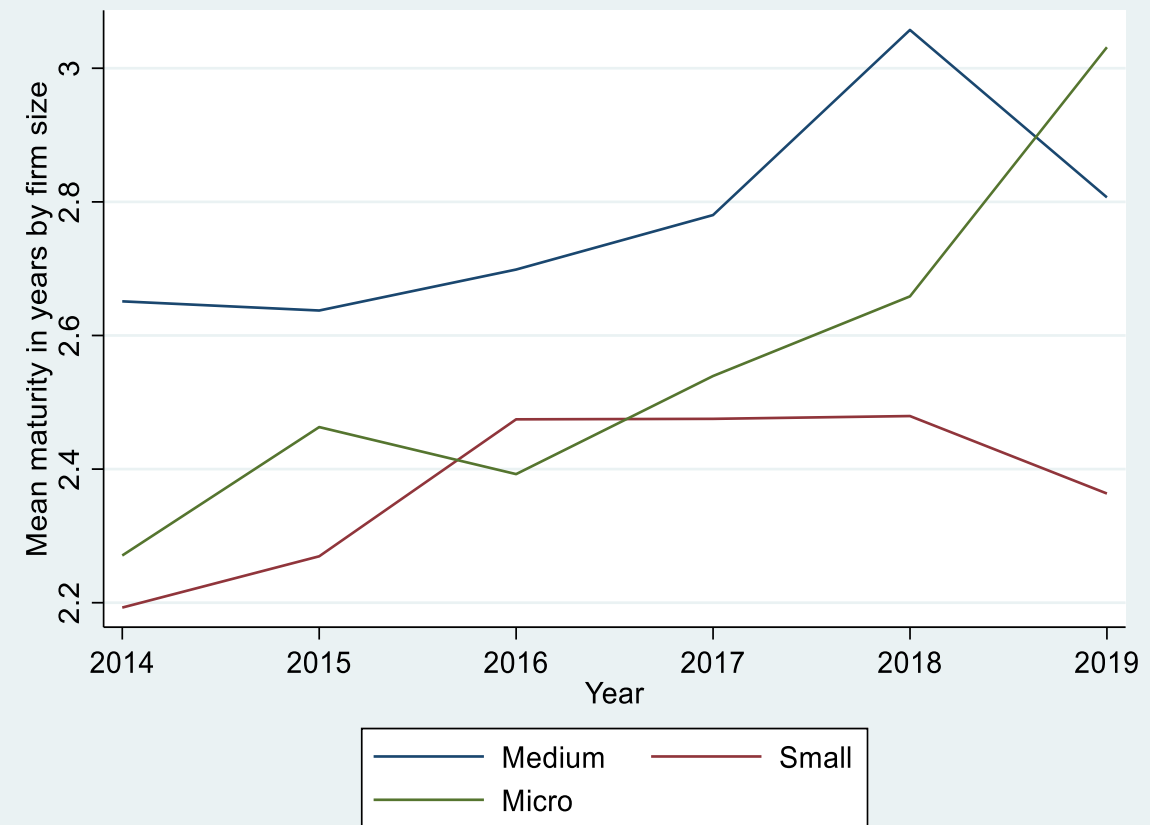
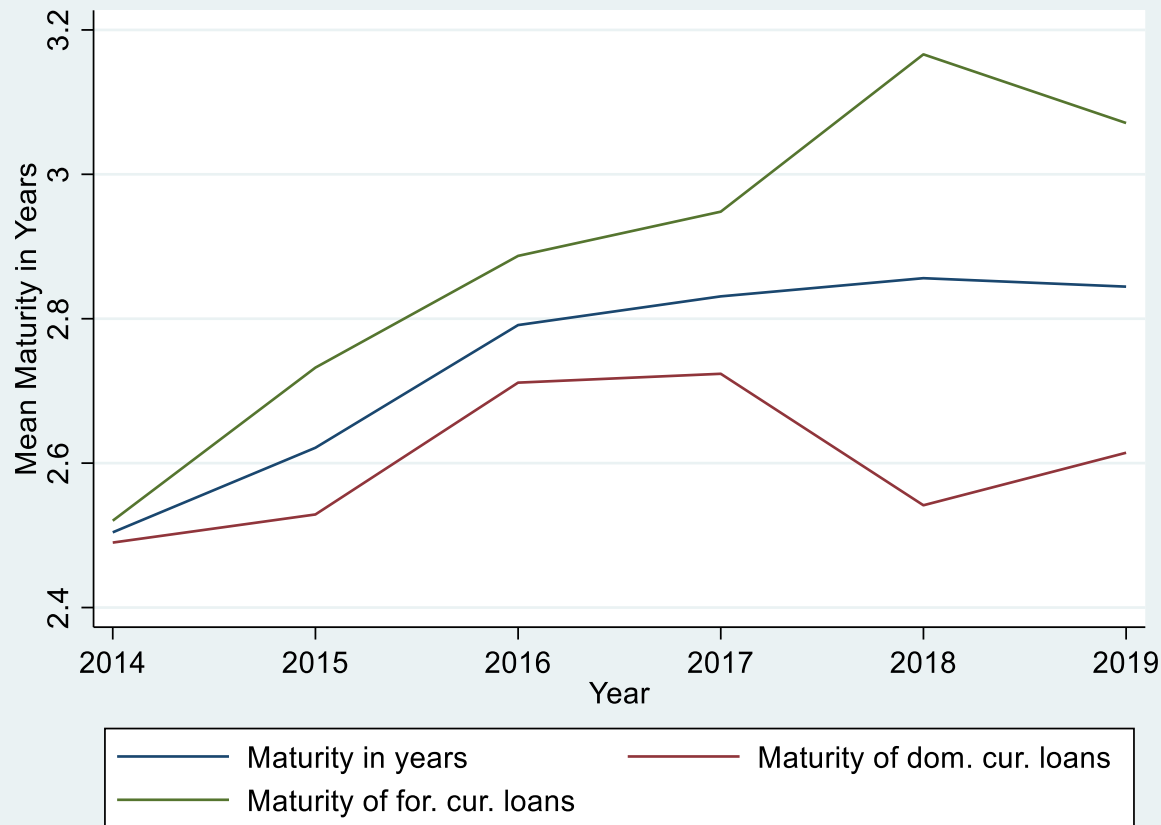
Foreign currency borrowing has a downward trend driven by large firms, but it is still prevalent.

Interest Rates



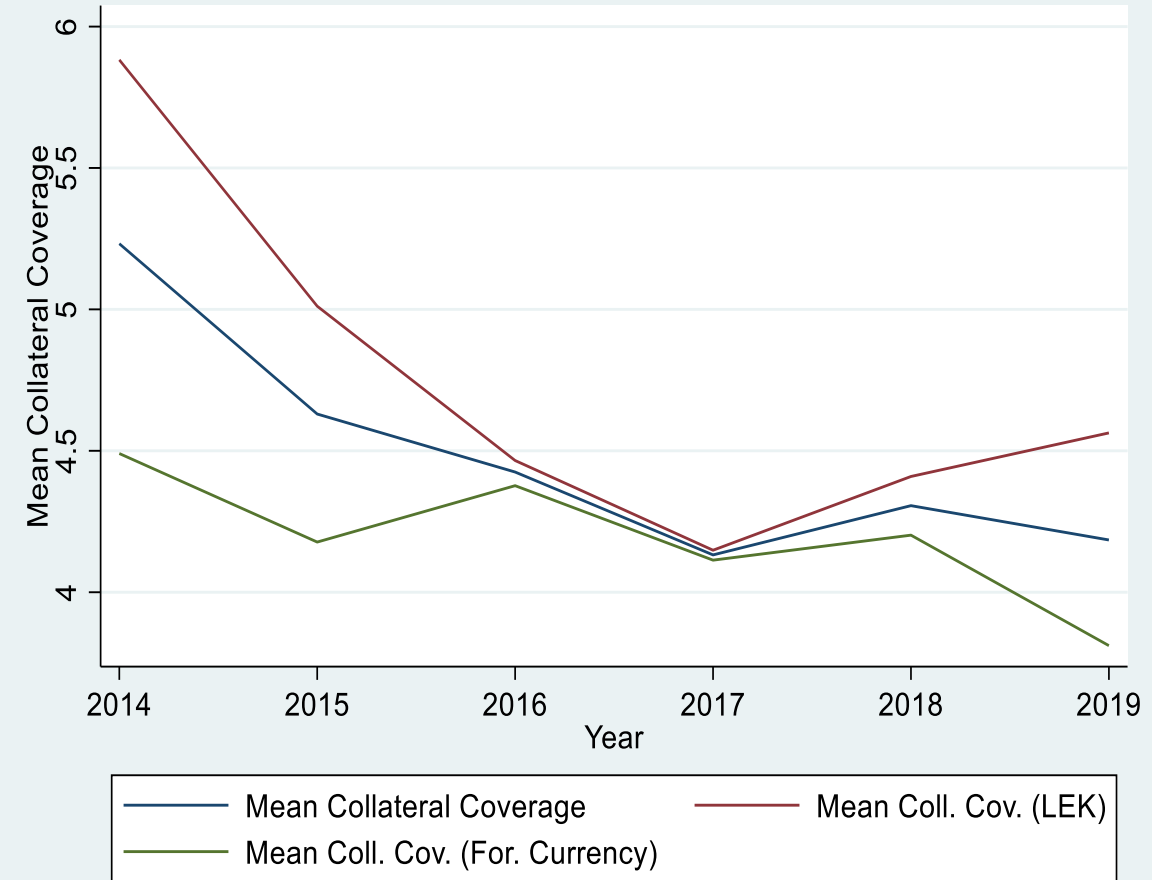
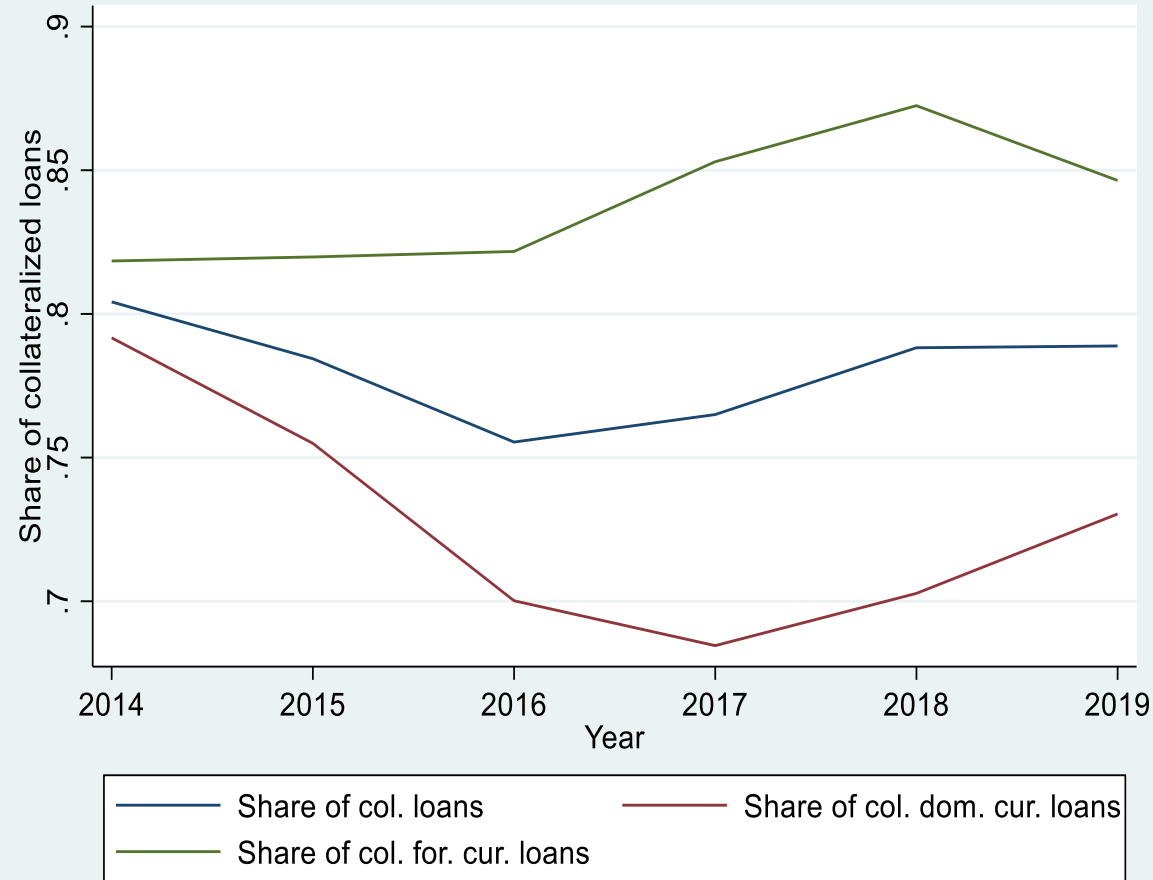
There is also a downward trend in mean interest rates. Yet the curve became flat after 2017 and micro firms are paying a large spread over other firms.

Maturity



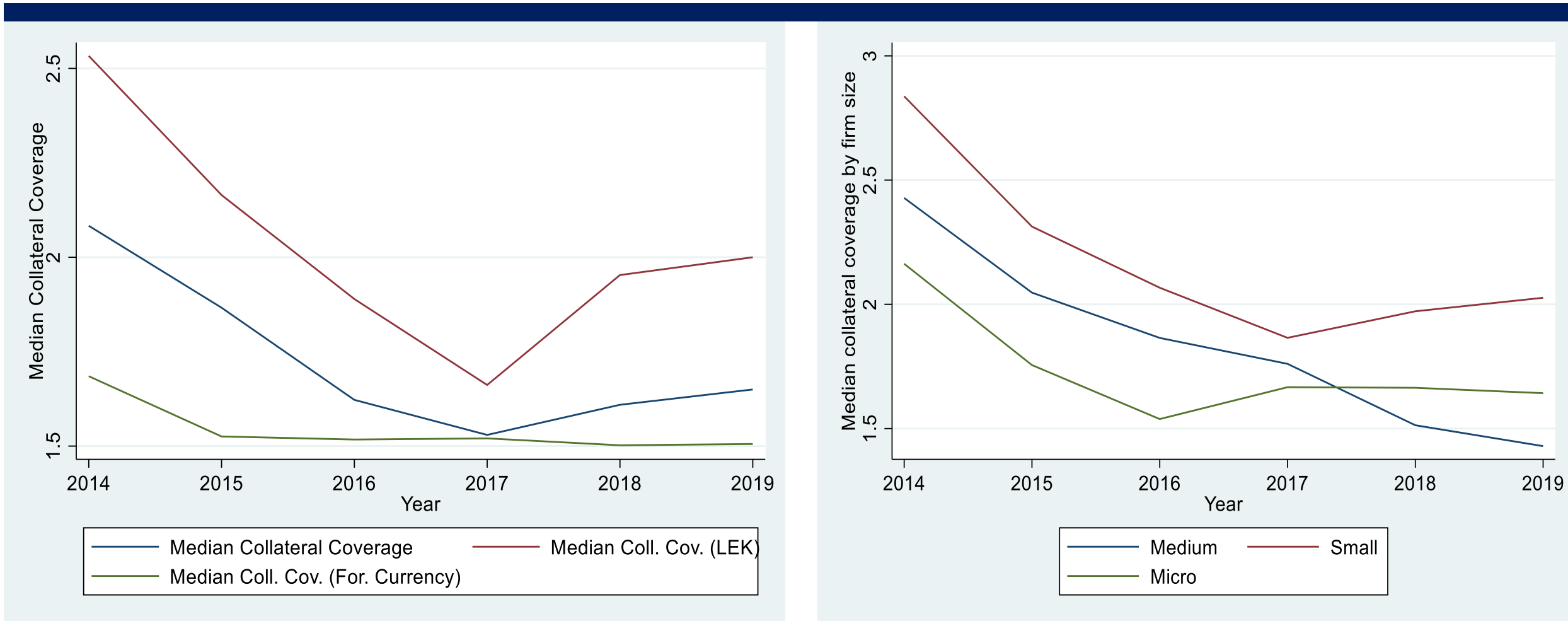
There is also an upward trend in mean maturities although heterogeneities exist (for example, maturity of domestic currency loans did not change much).

Collateralization (1)



Most loans are collateralized and mean collateral is enormous (more than 400% on average).

Collateralization (2)



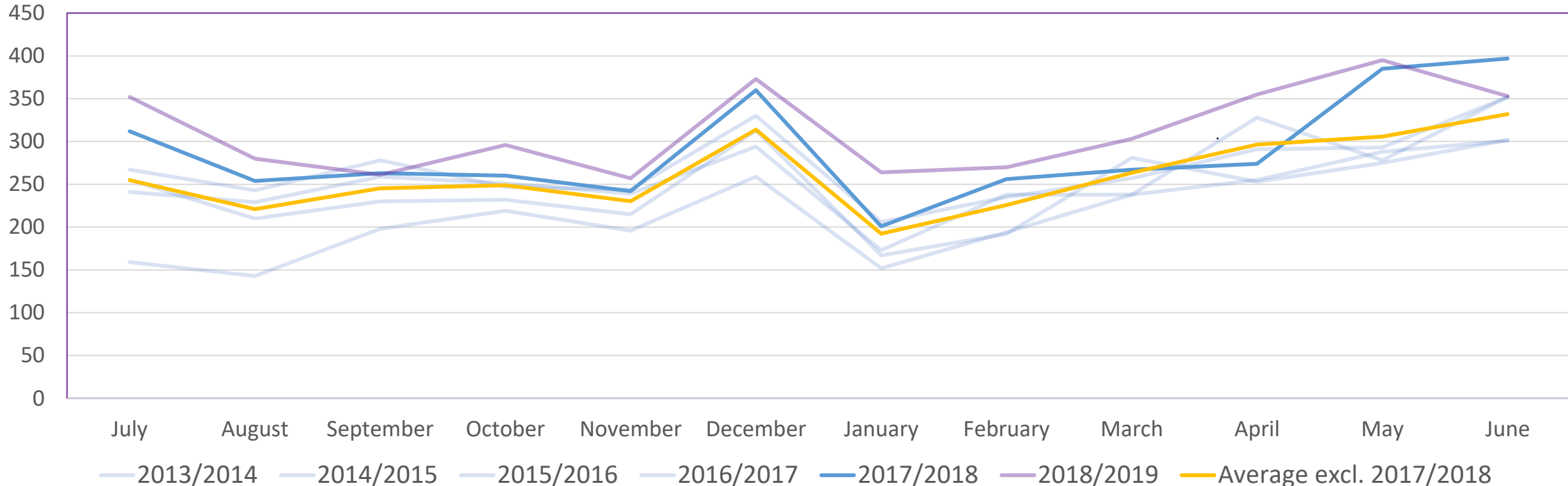
There was a downward trend in median collateral coverage, which stopped in 2017.

2. Implications of the Action Plan for Non- Performing Loans for MSME financing



Credit Extension over months (Micro and Small)

Monthly number of loans to micro and small firms



For smaller firms, the decrease in number of loans in January 2018 is the second highest reduction in the last 6 years and also higher than the average for other Januaries (44% vs. 38.7%). The data also shows the highest increase in number of loans in December, 2017, which may indicate more loans extended to smaller firms right before the new law was introduced. This provide suggestive evidence regarding the impact the new law without establishing causality.

3. Credit guarantee backed loan characteristics



CG loan characteristics compared to others (2011-2019)

Panel A	Ever-CG sample (mean firm age=10.4)			Full never-CG sample under 100 million LEK (mean firm age=10)	
	CG loans (n=37)	non-CG Loans (n=282)	collateralized non-CG loans (n=204)	non-CGF loans (n=54,592)	Collateralized non- CGF loans (n=43,280)
Loan size (millions of LEK)	17.87	26.29	27.70	10.5	11.2
Interest Rate (%)	8.44%	7.01%	7.04%	8.9%	7.9%
Collateral used (% of loans)	100%	72%	100%	79%	100%
Maturity (years)	3.64	2.2	2.44	2.9	3.2
Collateral coverage	391%	331%	459%	463%	593%

- On average, CGS loans are smaller and have a higher interest rate. Collateral coverage is not significantly lower (even with the credit guarantee support), when compared to non-CG loans to the same firms. Guaranteed loans appear to benefit from a longer maturity.

Loan Characteristics (MSME sample)

Panel B	Ever-CG MSME sample (mean firm age=10.6)			Full never-CG MSME sample under 100 million LEK (mean firm age=10.9)	
	CG loans	non-CG loans	collateralized non-CG loans	non-CGF loans	Collateralized non-CGF loans
	(n=24)	(n=158)	(n=117)	(n=29,904)	(n=24,960)
Loan size (millions of LEK)	18.9	27.9	30.1	11.44	11.72
Interest Rate (%)	8.77%	6.89%	7.00%	7.83%	7.27%
Collateral used (% of loans)	100%	74%	100%	84%	100%
Maturity (years)	3.55	2.26	2.37	2.65	2.89
Collateral coverage	375%	290%	392%	527%	638%

- Pre-CGS loans are similar to CGS loans but with much higher collateral coverage - documenting a clear benefit of the CGSs.
- The loans firms are granted following CGS loans are much larger, with lower interest rates, and much lower collateral coverage.

- These results may suggest rather limited benefits of credit guarantees and a tradeoff between maturity and interest rate.
- Given the reported valuation of credit guarantees included in the collateral coverage, the collateral benefits are actually higher.
- There may be dynamic benefits to the firms in their ability to get better credit in the future.

Panel C	Ever-CG MSME sample		
	Pre-CG loans	CG loans	Post-CG loans
	(n=35)	(n=24)	(n=123)
Loan size (millions of LEK)	19.4	18.9	30.4
Interest Rate (%)	8.54%	8.77%	6.43%
Collateral used (% of loans)	94%	100%	69%
Maturity (years)	3.51	3.55	1.86
Collateral coverage	536%	375%	217%

Annex



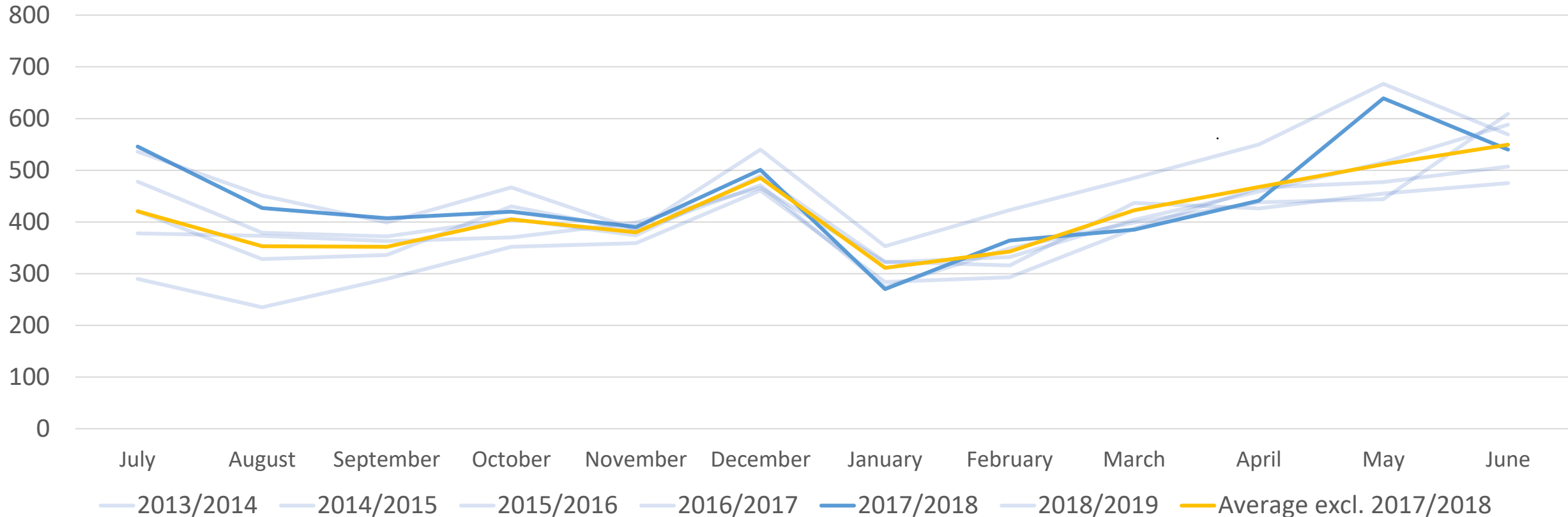
Credit Registry Alternative Samples

Full sample				Sample with loans to known firm size				Sample with loans with Credit Guarantee			
Year	No of Loans	Percent	Cum. Percent	Year	No of Loans	Percent	Cum. Percent	Year	No of Loans	Percent	Cum. Percent
2004	9	0.01	0.01	2004	3	0.01	0.01				
2005	73	0.12	0.13	2005	20	0.06	0.06				
2006	155	0.25	0.38	2006	44	0.12	0.19				
2007	344	0.55	0.93	2007	112	0.32	0.51				
2008	870	1.4	2.33	2008	269	0.76	1.27				
2009	751	1.21	3.54	2009	255	0.72	1.99				
2010	1,493	2.4	5.94	2010	537	1.52	3.5				
2011	2,686	4.32	10.26	2011	1,027	2.9	6.4	2011	4	9.76	9.76
2012	2,778	4.47	14.73	2012	1,274	3.6	10	2012	2	4.88	14.63
2013	5,366	8.63	23.36	2013	2,879	8.13	18.13	2013	6	14.63	29.27
2014	8,038	12.93	36.29	2014	4,649	13.13	31.26	2014	13	31.71	60.98
2015	7,774	12.5	48.79	2015	4,598	12.99	44.25	2015	5	12.2	73.17
2016	8,222	13.22	62.01	2016	4,915	13.88	58.13	2016	1	2.44	75.61
2017	8,842	14.22	76.23	2017	5,288	14.94	73.07	2017	3	7.32	82.93
2018	8,844	14.22	90.46	2018	5,807	16.4	89.47	2018	3	7.32	90.24
2019	5,934	9.54	100	2019	3,729	10.53	100	2019	4	9.76	100
Total	62,179	100		Total	35,406	100		Total	41	100	

Notes: Full sample is after initial cleaning and trimming (interest rates, maturity, small loans).

Credit Extension over months (Full sample)

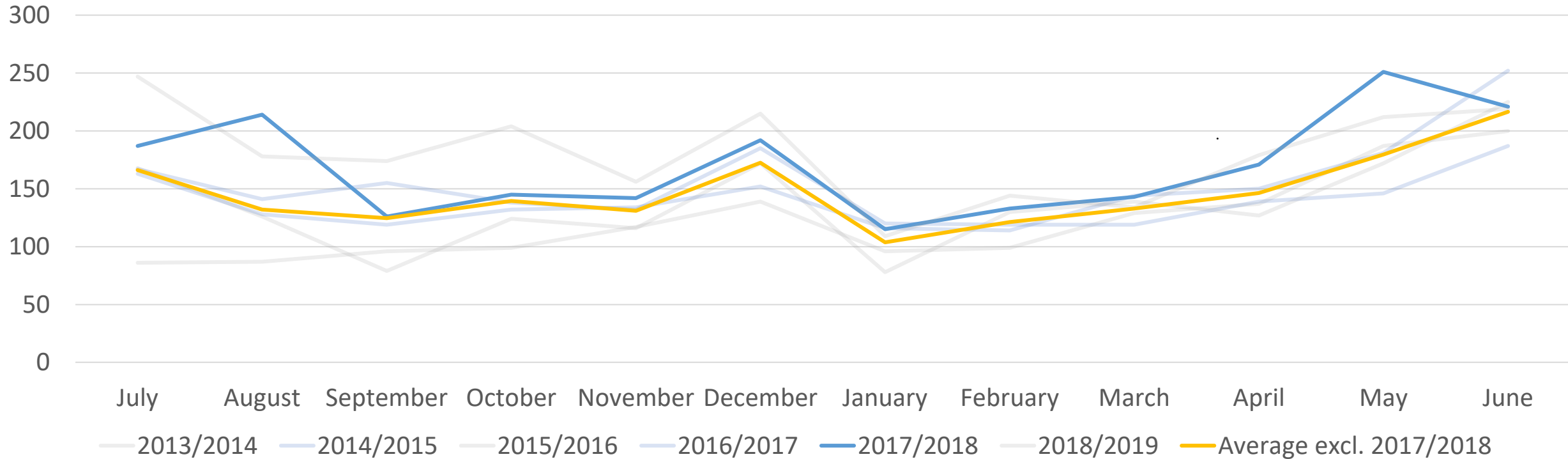
Number of loans by month (Full sample)



The decrease in number of loans in January 2018 is the highest reduction (46% from the previous month) in the last six Januaries from 2014 to 2019 (with an average reduction of 36% in other Januaries). In addition, an increase in number of loans in December, 2018, is evidenced but the change is much closer to the average of other years (28.5% vs. 27.7%).

Credit Extension over months (Medium and Large)

Monthly number of loans for medium and large firms



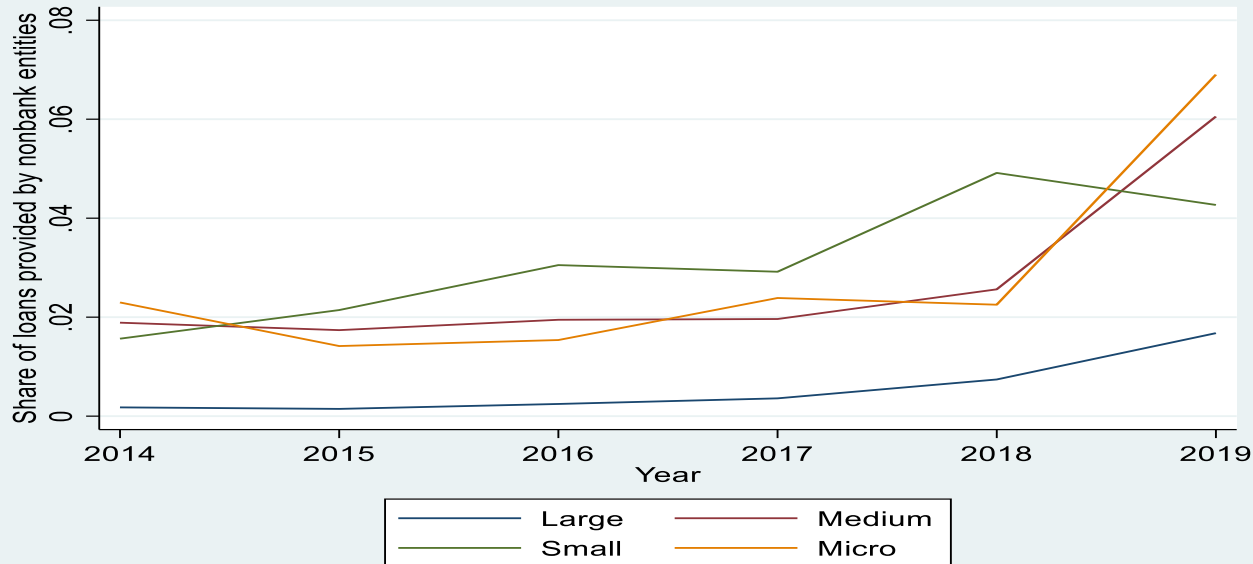
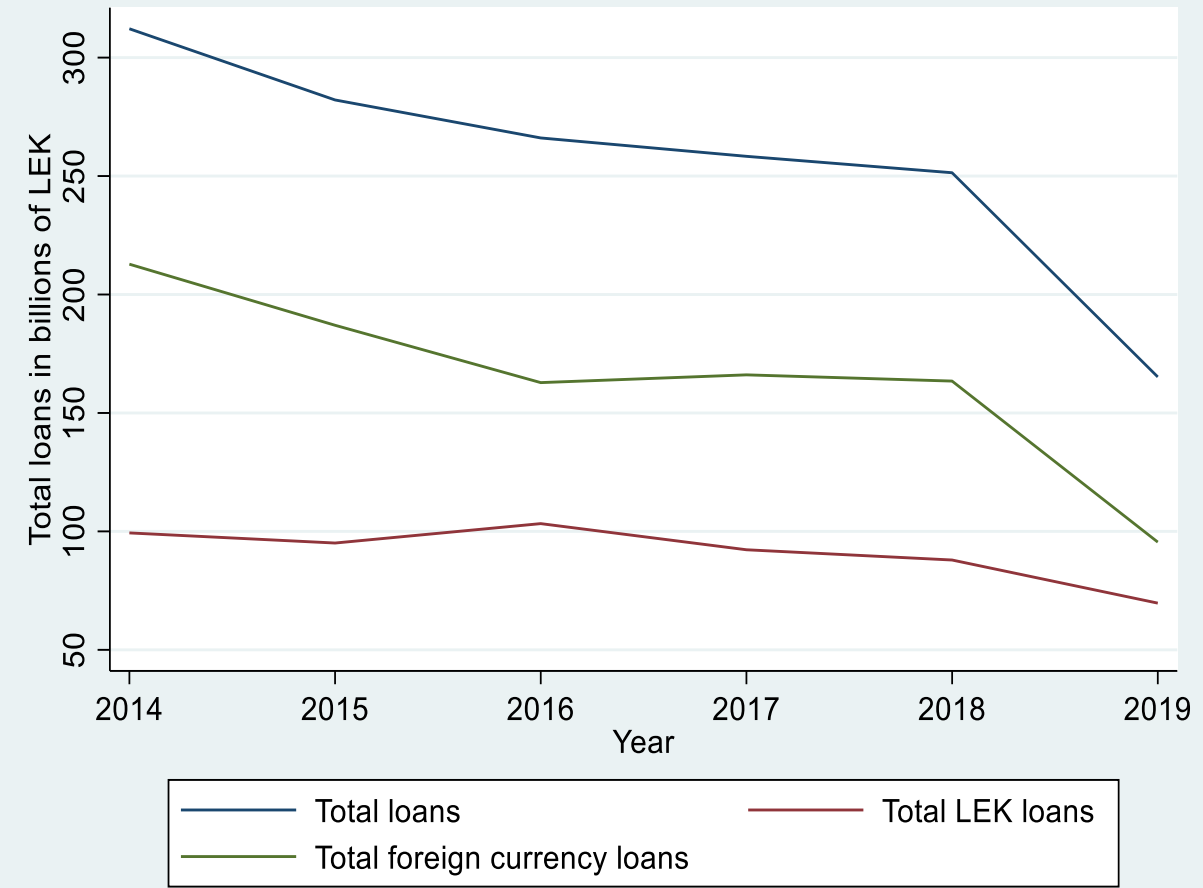
Finally, in panel C, both the increase in December 2017 and the decrease in January 2018 in number of loans extended to medium and large firms are quite close to the averages for these months. These provide suggestive evidence regarding the impact the new law without establishing causality.

Albanian Credit Markets (1)

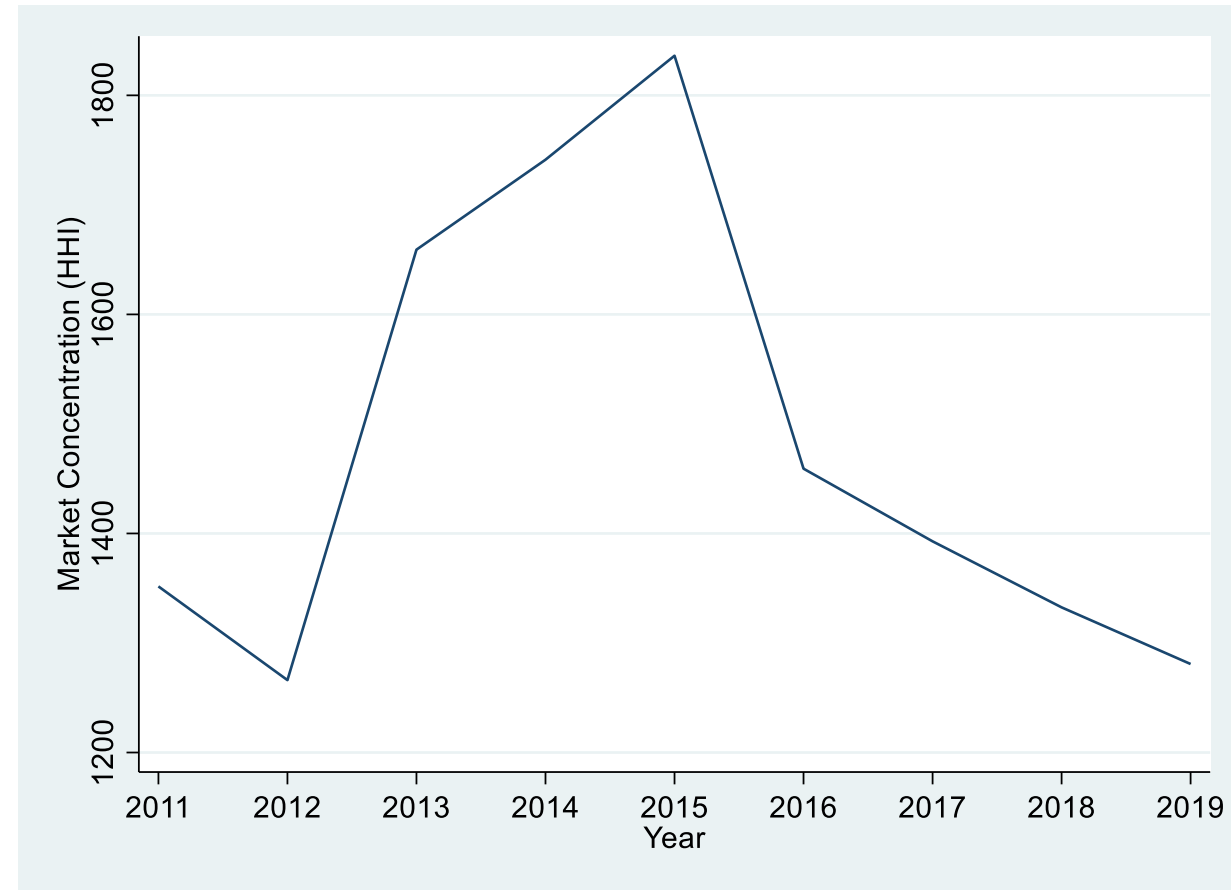
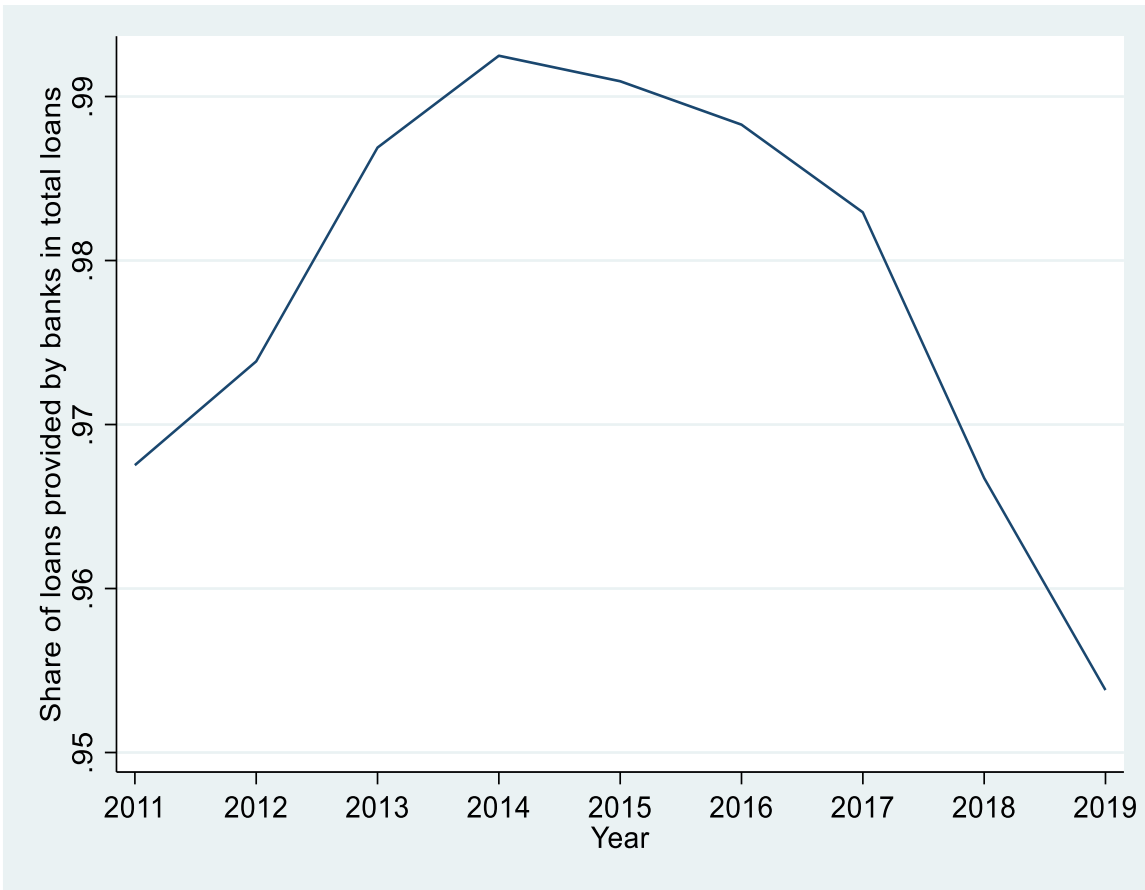
Table 1: Domestic credit-to-GDP ratio for Western Balkans economies

Economy	2014	2015	2016	2017	2018	2014–18 abs. change	2014–18 credit growth	2014–18 GDP growth
ALB	39.3	37.2	36.6	35.1	33.1	-6.2	-0.2	18.4
BiH	60.2	58.7	57.9	58.3	58.6	-1.6	17.4	20.6
MKD	50.5	52.0	49.0	50.0	50.3	-0.2	24.7	25.1
MNE	51.3	49.8	48.8	48.7	49.6	-1.7	27.8	32.2
SRB	40.8	40.7	41.0	40.3	41.5	0.7	24.0	22.0
KOS	35.4	36.4	38.7	41.3	44.3	8.9	51.9	21.4

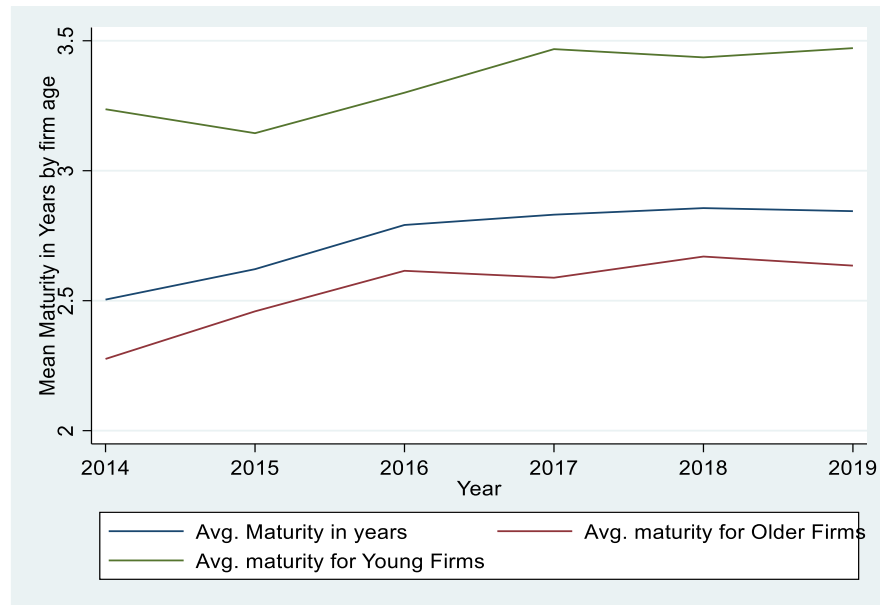
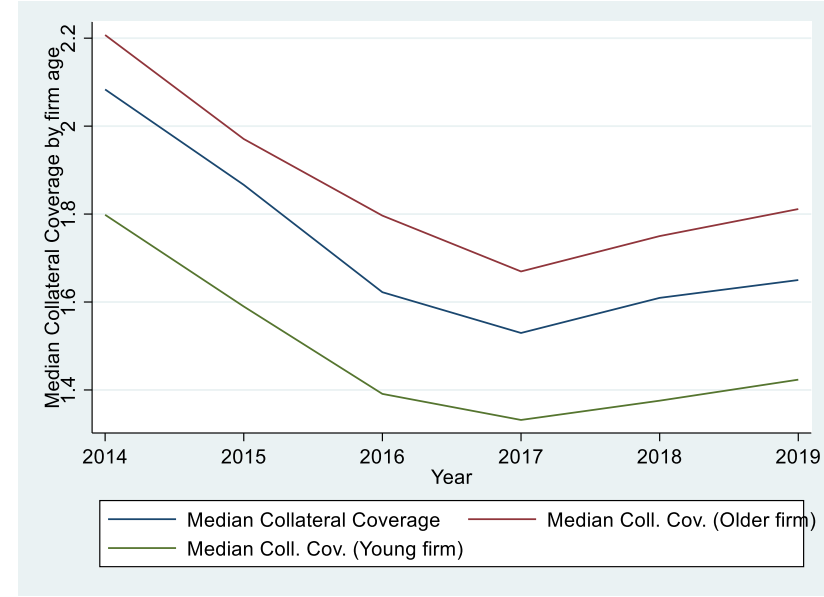
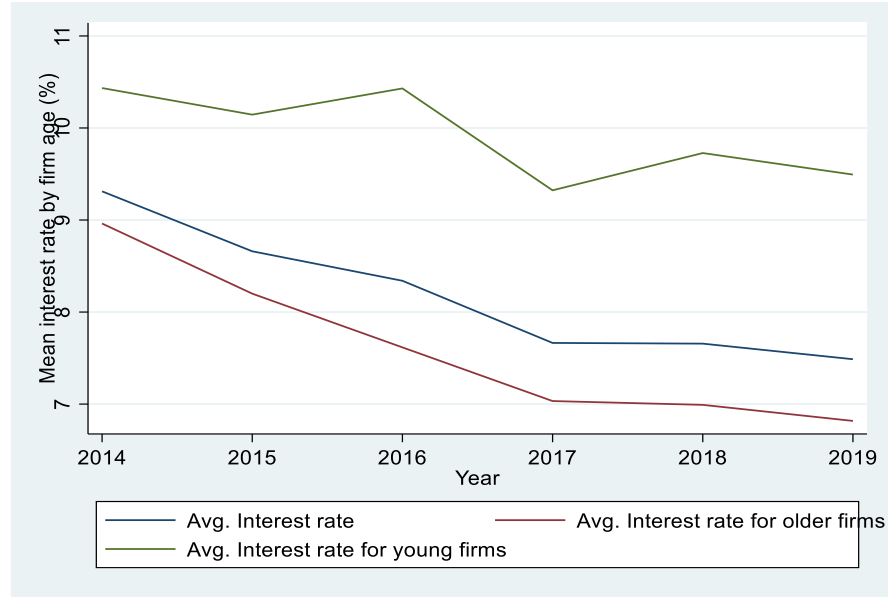
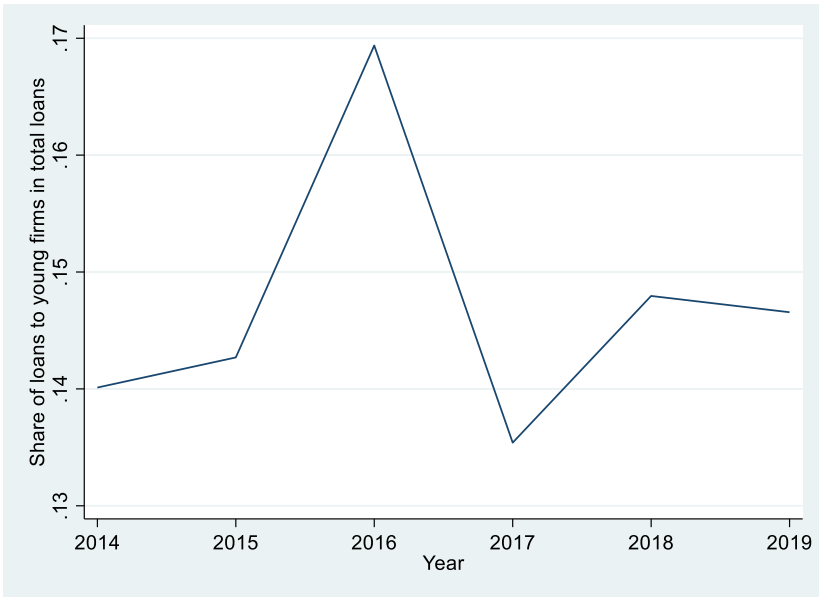
Source: World Bank data, WBG staff calculation.



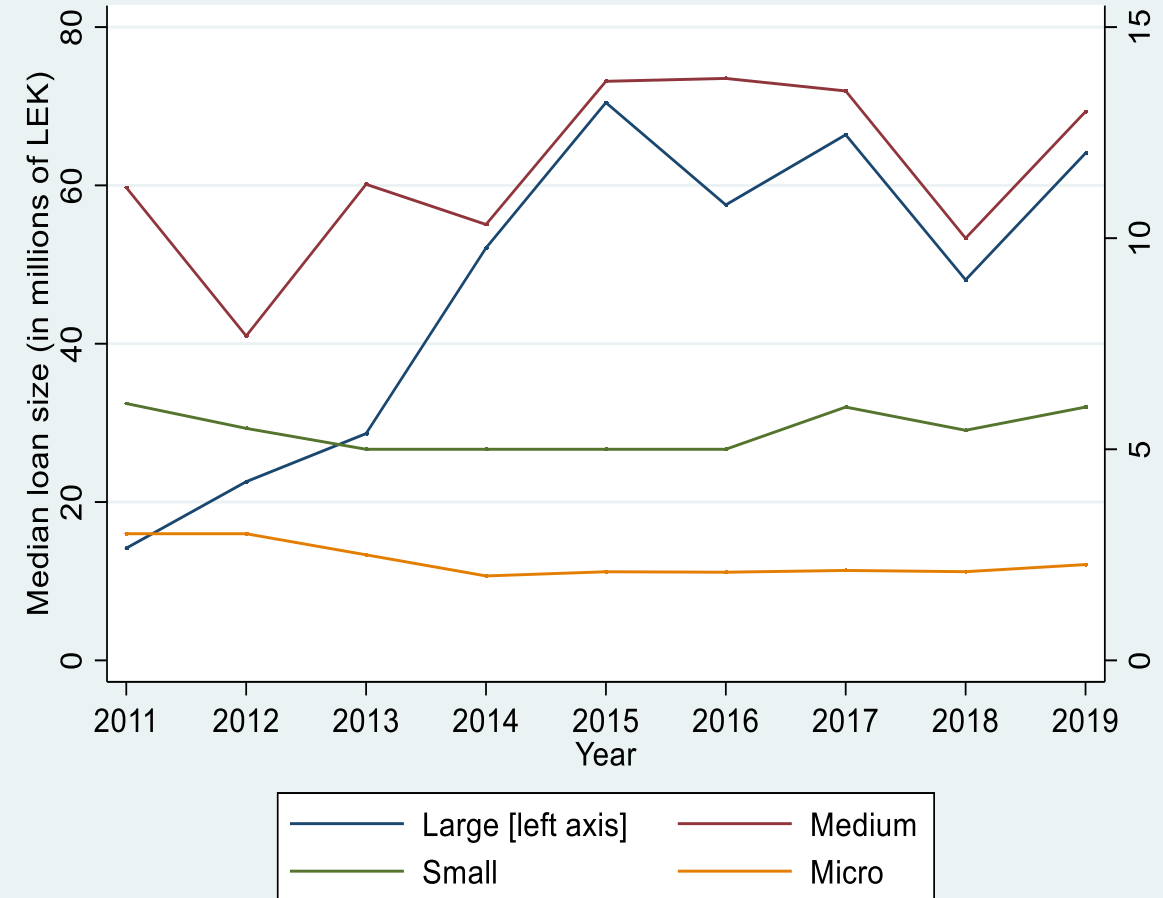
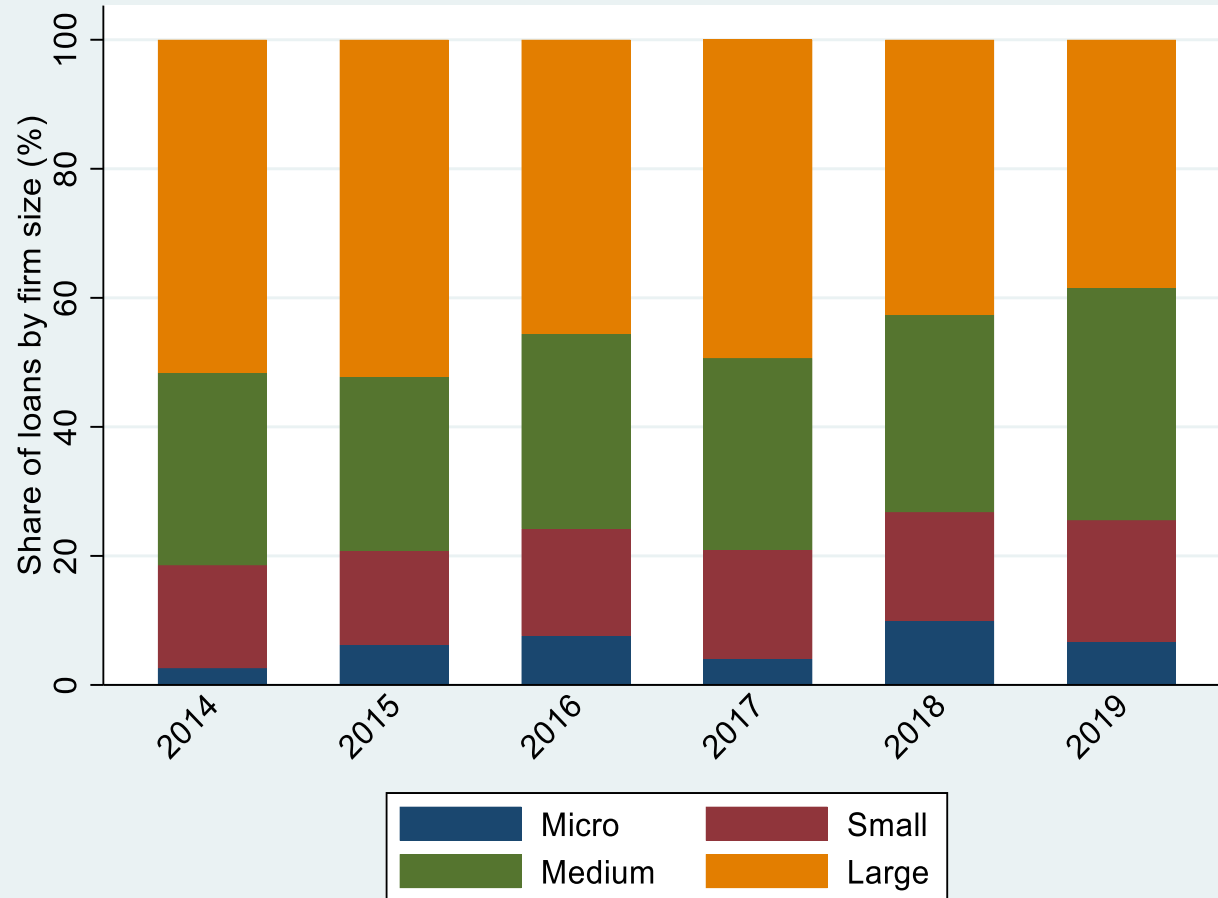
Albanian Credit Markets (2)



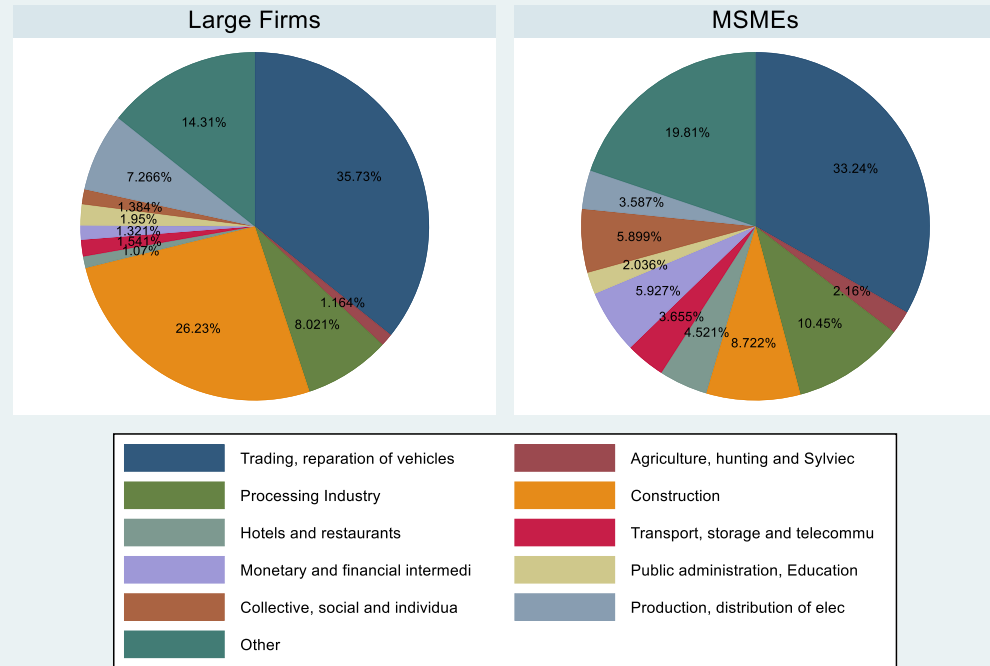
Loans to Young Firms



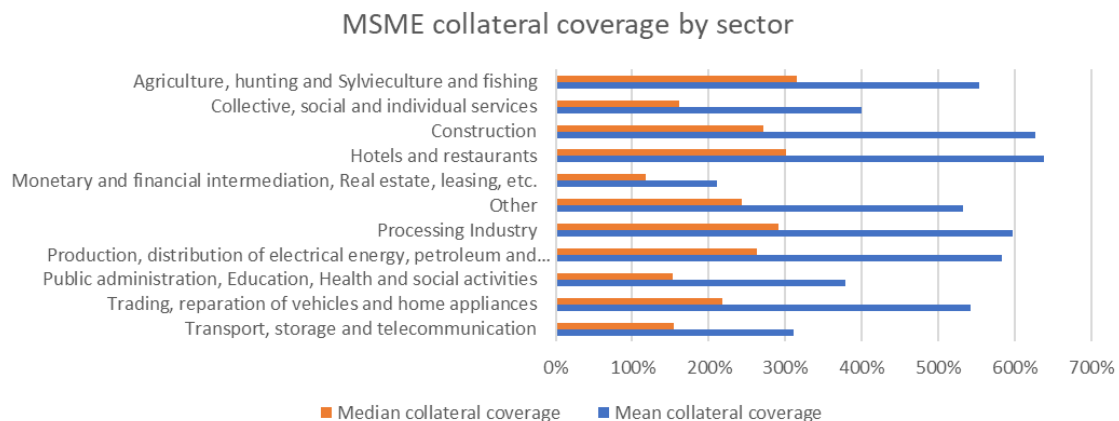
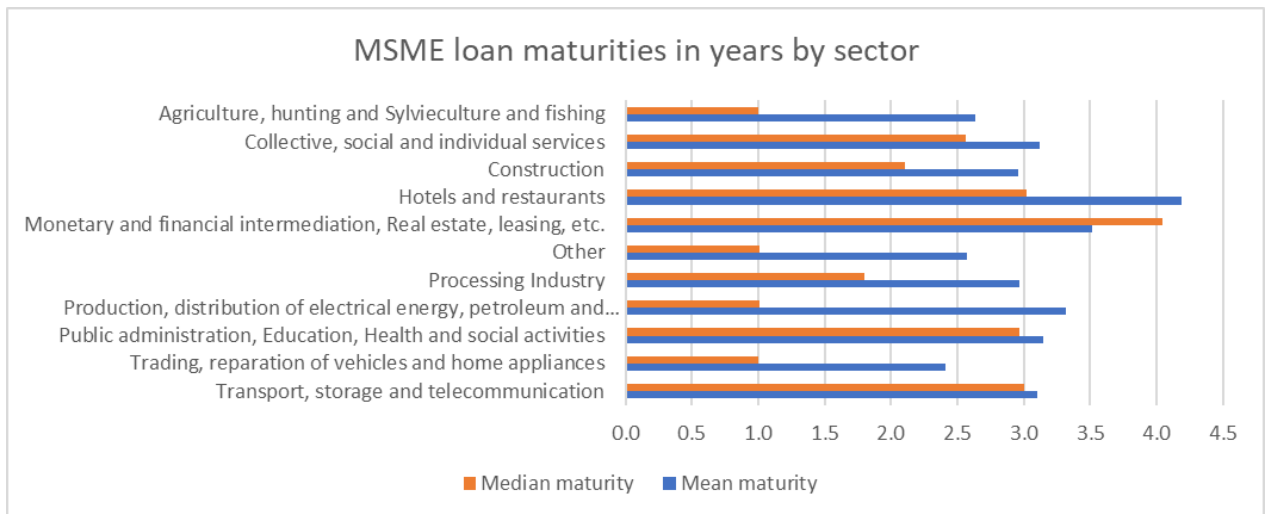
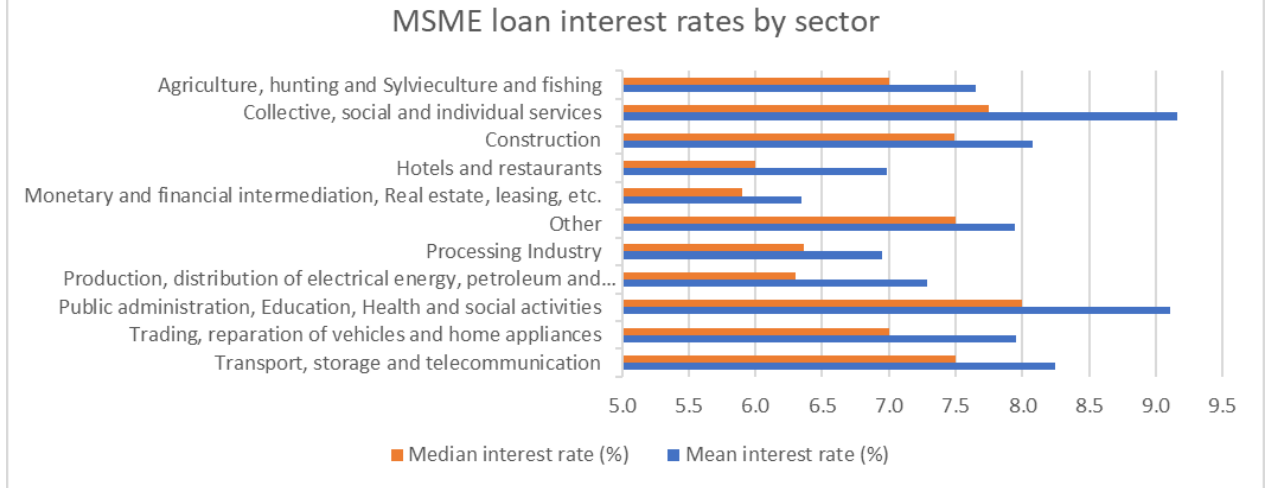
Share of Loans and Median Loan Size



Sectoral Distribution

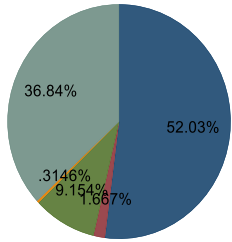


Graphs by Firm size (Large firms vs. MSMEs)

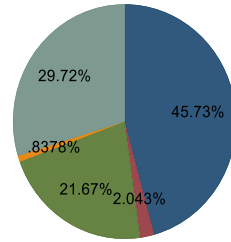


Loan Types and Purpose

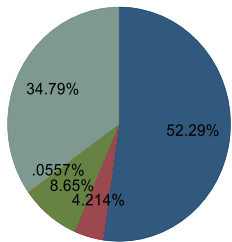
Large



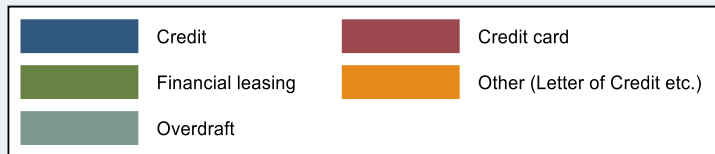
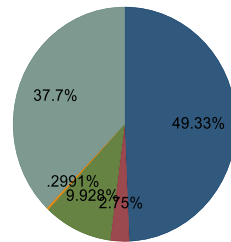
Medium



Micro

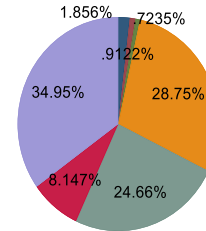


Small

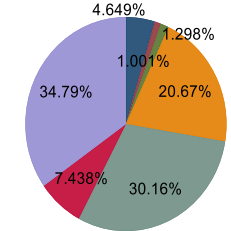


Graphs by Firm size

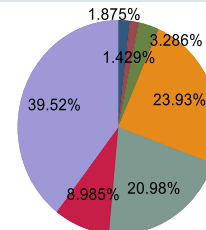
Large



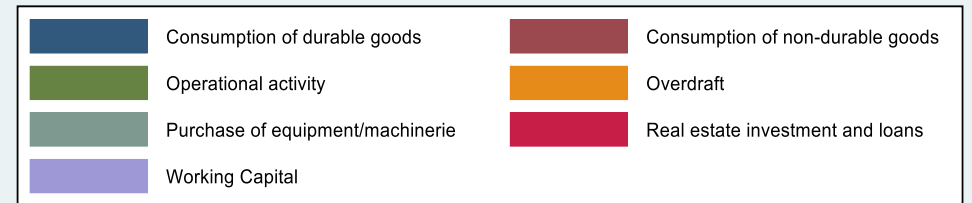
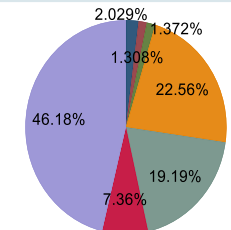
Medium



Micro



Small



Graphs by firm size