

INTRODUCTORY BANKING



Lecture I – Basics of Banking

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1. The Bank and the Banking sector
2. Bank and its Financial statements



Types of Financial Intermediaries

- Financial intermediaries hold **financial assets rather than real assets**

Type of Intermediary	Primary Assets (Uses of Funds)	Primary Liabilities (Sources of Funds)	
Depository institutions (banks)	Commercial banks	Corporate loans Consumer Loans Mortgages Government Bonds Municipal Bonds	<i>Maturity transformation</i>
	Building society	Housing loans	<i>„Information“ transformation</i>
	Credit unions	Consumer Loans	<i>FX transformation</i>
Other financial intermediaries (OFIs)	Insurance companies	Corporate Loans Government Bonds Stocks	<i>Interest rate transformation</i>
	Pension funds	Corporate Bonds Government Bonds Stocks
	Finance companies Lending companies	Corporate loans Consumer Loans	
	Mutual Funds Investment Fund Hedge Fund, Private Equity Fund	Corporate Bonds Government Bonds Stocks	
	Money market mutual funds	Money market instruments	

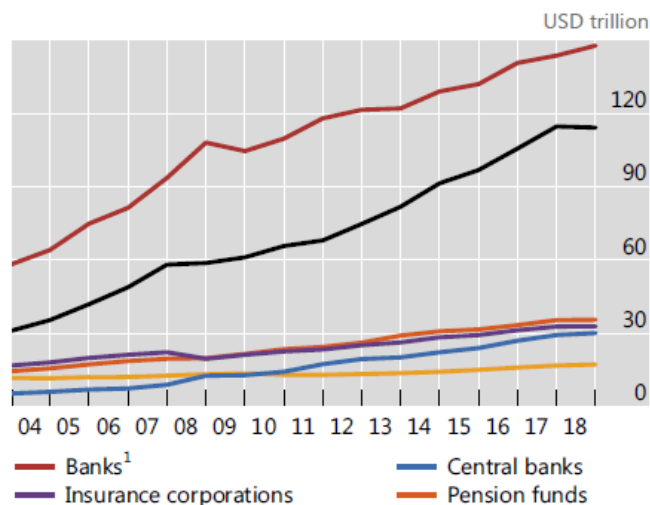
The Role of Banks in the Global Financial System

Assets of financial intermediaries

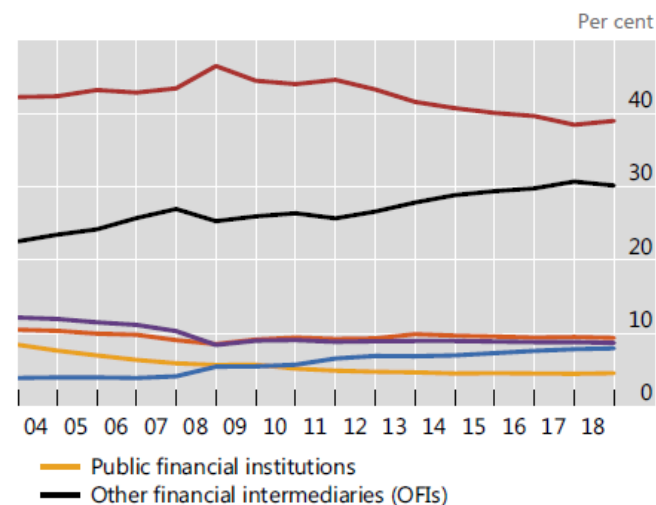
21+EA-Group

Exhibit 2-2

Total global financial assets



Share of total global financial assets²



¹ All deposit-taking corporations. ² Weighted average based on total national financial assets.

	Total global financial assets	Central banks	Banks	Public financial institutions	MUNFI	Insurance corporations ¹	Pension funds	OFIs	Financial auxiliaries ²
Size at end-2018 (USD trillion)	378.9	30.1	147.9	17.3	183.7	32.9	35.6	114.3	1.0
Share of total global financial assets (%)	100.0	7.9	39.0	4.6	48.5	8.7	9.4	30.2	0.3
Growth in 2018 (year-over-year, %)	1.4	2.5	2.8	3.2	-0.1	0.2	0.4	-0.4	8.8
Growth 2012-17 (annualised growth, %)	5.9	8.5	3.4	4.7	7.8	5.5	6.3	9.0	8.8

I. Where do you see current challenges/topics/issues in Banking ?



Current challenges in banking

Business side

- Low interest rate level (in Euroarea (zero or negative monetary policy rates); picking up since 2017 in the Czech Republic, sudden drop during the spring wave of COVID 19 pandemic), 2W repo-rate of CNB currently at 0,25 %
- Low margins
- Higher volumes thanks to solid economic growth until 2019, stagnating or decreasing volumes in 2020 (depending on fiscal stimulus), CZ – mortgage market still booming
- Higher operational efficiency
- COVID 19 pandemic already reflected in decreased profits 2020. esp. due to higher provisions
- Generally low profitability of traditional commercial banks in the EU
- Search for other revenue opportunities (revenue sources) - „Related activities“ (bancosurance, sell of energy, telecommunication products, tax and legal advice on financial services, securities brokerage etc)
- In CZ – continuous shift to retail banking (corporate segment grows at lower pace than retail banking (mortgage and consumer banking))

Observed changes in banks' business models

..... are already reflected in

- new products and service innovations
- digitization, robotic process automation (RPA)
- changes in the distribution network (including possible reduction of physical branches) or outsourcing of branch network
- establishment, co-operation with or control of new FinTech companies
- centralization of some activities to parent bank or group

Acceleration of automation and on-line services during and after COVID 19 pandemic

Current challenges in banking

Regulatory side

- High complexity of regulation (CRD V/CRR II and many RTS and ITS)
 - (Regulatory technical standards and Implementation technical standards)
- EBA Guidelines
- BIS Recommendations
- Supervision of
 - solo institutions
 - consolidated groups (incl. non-bank financial institutions within the group, incl. financial holdings)

Current challenges in banking

Regulatory side during COVID 19 pandemic

EU Commission introduced „Banking package“ containing a draft amendment of CRR („CRR-COVID“)

- application of „**flexibility**“ in the regulatory and accounting frameworks, e.g.:
 - **extension** of the transition period for incorporating changes arising from IFRS 9 into regulatory capital
 - **postponing** the date of application of the leverage ratio from 1 January 2023
 - **extends** the preferential treatment of non-performing exposures to a broader set of public guarantee providers

Concrete relieves (examples, different in different jurisdictions)

- LTV relaxation
- LCR relaxation
- Decrease of counter-cyclical capital (CCy) buffer requirement

Definition of a bank

- General definition - a financial provider or a deposit institution collecting free money and offering loans to different subjects as well as services (Půlpán a kol. (1998)).
- „EU“ definition - EU Directive No. 2013/36/EU and Regulation No. 575/2013 (CRD IV and CRR) defines a credit institution (which a bank is), as a) an undertaking whose business it is to receive deposits and other repayable funds from the public and to grant credits for its own account, or b) an electronic money institution within the meaning of Directive 2009/110/EC.
- **„Act on Banks“ definition (No. 21/1992 Coll.) - a bank is a joint-stock company accepting deposits from the public and granting loans, licensed by the Czech National Bank.**

CRD IV and CRR = Capital requirement directive and Capital Requirement Regulation

2. What are the key functions of a bank ?



The key functions of a bank

- Effective transformation of capital
- Effective investment of deposits into earning assets
- Maturity transformation (short-term liabilities are transformed into long-term assets)
- Dealing with information asymmetry

- Non-cash money supply
- Cash and non-cash payment services

What's the aim of bank's management?

To manage the bank with the goal of maximizing its value for shareholders under risk conditions

Bank-oriented vs. capital market oriented financial system



	Bank-oriented financial system	Capital-market-oriented financial system
Liquidity transformation	<ul style="list-style-type: none"> • Via transformation of lots and terms 	<ul style="list-style-type: none"> • Savings flow into the economic cycle directly via various investment instruments (bonds, stocks, funds, derivatives)
Risk transformation	<ul style="list-style-type: none"> • Banks offset risk • Risk-offsetting tends to be inter-temporal • Restricted to a few risk carriers 	<ul style="list-style-type: none"> • Investors offset risk • Risk-offsetting tends to be inter-sectoral • Investors assume risk in line with their readiness to take risks
Information transformation	<ul style="list-style-type: none"> • Internalization of information by banks, leading to duplication • Restricted information transparency 	<ul style="list-style-type: none"> • Externalization of information via brokers and media • High information transparency
Corporate control	<ul style="list-style-type: none"> • Controlling orientation (relationship lending) • Maximization of stakeholder value 	<ul style="list-style-type: none"> • Liquidity orientation/maximization of returns • Maximization of shareholder value
Legislation/supervisory authorities protection	<ul style="list-style-type: none"> • Strong culture of creditor and depositor protection 	<ul style="list-style-type: none"> • Increased level of shareholder and investor protection

Source: Mejstřík et al. (2008)



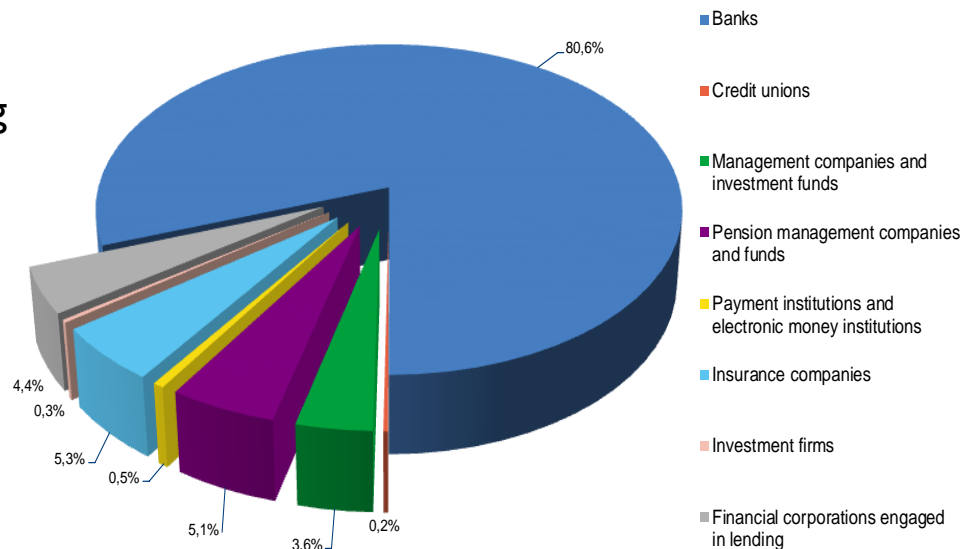
Banking sector structure in CZ

- ✦ **Czech banking sector – ca 80 % of the whole financial sector (2020), measured by assets**
- ✦ **As of end 2019 - direct and indirect foreign control accounted for more than 92 % of banking assets (stable since 2001, after completion of Komeční banka privatization)**

As of 02/2021 – 47 banking institutions

- ◆ 23 banks (out of these 5 building societies)
- ◆ 24 branches of foreign banks (out of these 2 non-European)

and 8 negligible cooperatives



Source: Financial Market Supervision Report, 2002, 2019, ARAD Database, www.cnb.cz



Banking sector structure in CR

Czech banking sector consists of 47 banks of which 4 operates as building societies and 24 as branches of foreign banks.

- **Czech ownership** prevails only in 2 state-owned banks (CEB – support of CZ exporters, CMZRB – support of SMEs) and three other mid-sized and small banks (Fio banka, PPF banka, Air Bank) have also Czech owners; **however, all other banks are direct or indirect subsidiaries of foreign banks**
- **Recent consolidation**
 - **Moneta Money Bank** - purchase of **Wüstenrot** mortgage bank and **Wüstenrot** building society
 - **Moneta Money Bank** - purchase of **Air Bank** ?
 - **Raiffeisenbank** – purchase of **Equa Bank** ?
- All parent banks of CZ subsidiaries are coming from EU countries
 - Except of one middle-sized bank (Sberbank – Russia/ (through Sberbank EU)) and one small bank (Expobank CZ – Russia)
 - Distribution of ownership is diversified across EU countries. The largest banks are owned by banks from different EU countries (Austria, France, Belgium and Italy)
- The foreign bank branches in the Czech Republic are mainly from EU countries (based on single licence principle) – just 2 are indirectly (through European subsidiary) owned by Japanese, 1 by Chinese and 1 by the US bank, 2 branches are from a third country (China)

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Basic operations of banks

Basic operations of banks are reflected in the BALANCE SHEET

The balance sheet is a statement of the assets, what the company **owns**, and liabilities, what the company **owes**. The balance sheet shows (at a certain point in time):

- how the cash is invested in the business
- how the assets are balanced with the liabilities
- how the company is financed.

INCOME STATEMENT (P/L)

Profit and loss accounts (income statements) record the trading activities of a company for a given period of time. The profit and loss account:

- compares revenues for the year against the cost of goods sold, and other expenses – disclosing the profit or loss made
- measures the current performance of the business, and shows the turnover and expenses
- shows how the profit was earned and how much was taken in taxation.

CASH FLOW STATEMENT

The cash flow statement reports the net changes in the cash balance and helps to explain **how the surplus or deficit in cash arose**. The cash flow statement has the advantage of being based on hard facts, since its preparation requires no valuation decisions, unlike the income statement. The cash flow statement is:

- a report on the financial effects of all transactions during the accounting period
- a mixture of capital and revenue transactions and is retrospective

Basic classification – cash flow from operating, investing and financing activities

Basic operations of banks

Asset side - Active banking operations reflect the **use** of funds, operations in which a bank grants credits to third parties or purchase securities (the bank as **creditor**).

Liability and equity side - Passive banking operations, bank as **debtor**, operations linked to **acquiring new sources/funds** (collection of deposits, issuing bonds, CD's and inter-bank loans, issuing shares (equity) and setting up reserve funds and other funds from the profit).

Off-Balance sheet - represent a) **certain** receivables (assets) or obligations (liabilities) in the future or b) **uncertain** receivables (assets) or obligations (liabilities) contingent upon certain conditions occurring (e.g.CDS).

Assets	Total Liabilities
Assets	Liabilities
	Equity

3. What are the main asset and liability items of a bank ?

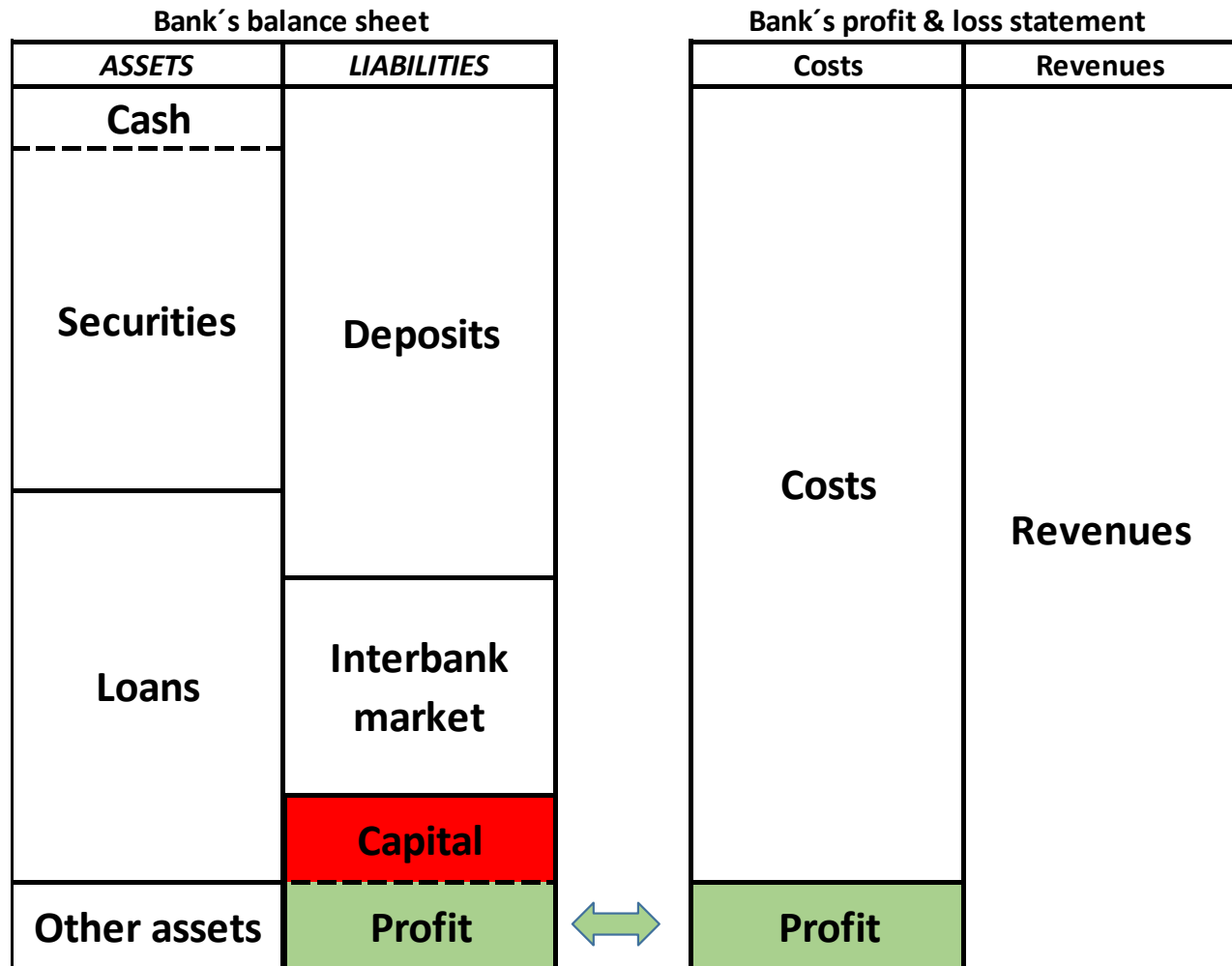


Basic operations of banks

Bank's balance sheet	
<i>ASSETS</i>	<i>LIABILITIES</i>
Loans	Deposits
Securities	Interbank market
Other assets	Capital

Non-financial firm's balance sheet	
<i>ASSETS</i>	<i>LIABILITIES</i>
Current assets	Current liabilities
Investments	Long-term liabilities
Property, plant, equipment	Capital (Equity)
Intangible assets	
Other assets	

Basic operations of banks



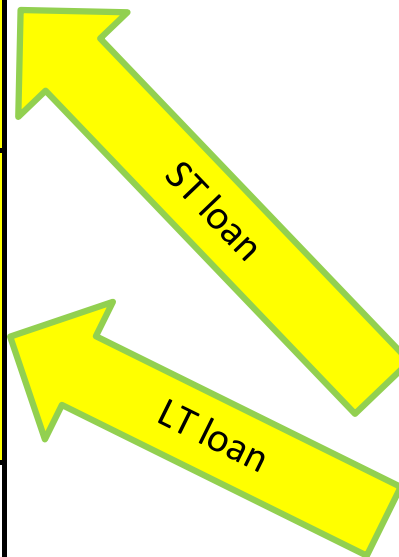
Basic operations of banks

Non-financial firm's balance sheet

ASSETS	LIABILITIES
Current assets	Current liabilities
Investments	Long-term liabilities
Property, plant, equipment	Equity
Intangible assets	
Other assets	

Bank's balance sheet

ASSETS	LIABILITIES
Cash	Deposits
Securities	
Loans	Interbank market
Other assets	Capital



Example 1

The Bank has the following items in its balance sheet: shareholder equity of 30, retail deposits of 75, bond investment of 25, loans granted of 112, bonds issued of 8, equity investment of 17, and guarantee issued of 25 and corporate deposits of 36. Show the balance sheet of the Bank, identify the amount of the missing item and propose what it could be.

Assets		Liabilities and shareholder equity		
Corporate deposits	36			
		Equity investment	17	
Retail deposits	75		Guarantee issued	25
			Loans granted	112
Bonds issued	8			
		Shareholder equity	30	
		Bond investment	25	

Czech banking sector assets



	30.09.2020	31.12.2019	31.12.2018	31.12.2017	31.12.2016
Assets, total	8 497 978	7 547 246	7 279 166	7 001 932	5 960 422
1. Cash, cash balances at central banks and other demand deposits	278 229	224 332	270 065	664 636	833 025
2. Financial assets held for trading	197 502	95 695	92 493	81 601	107 141
2.1. Derivatives	142 479	81 839	65 655	60 826	61 365
2.2. Equity instruments	2 310	949	839	1 474	2 290
2.3. Debt instruments	43 771	12 906	25 998	19 300	36 235
2.4. Loans and advances	8 941	-	1	-	7 251
3. Non-trading financial assets mandatorily at fair value through profit or loss	15 503	12 442	8 431	388	17
3.1. Equity instruments	11 493	8 992	7 352	388	17
3.2. Debt securities	2 140	1 043	337	-	-
3.3. Loans and advances	1 870	2 407	742	-	-
4. Financial assets designated at fair value through profit or loss	1 923	2 438	1 849	4 767	9 825
4.1. Debt securities	1 897	2 415	1 835	4 702	9 763
4.2. Loans and advances	26	23	14	65	63
5. Financial assets at fair value through other comprehensive income	209 679	167 526	190 685	275 499	388 503
5.1. Equity instruments	2 215	2 518	3 848	8 618	8 112
5.2. Debt securities	196 154	155 806	178 734	266 872	380 382
5.3. Loans and advances	11 310	9 203	8 103	9	9
6. Financial assets at amortised cost	7 503 949	6 814 403	6 513 053	5 769 594	4 406 365
6.1. Debt securities	1 040 023	804 360	782 045	657 468	659 884
6.2. Loans and advances	6 463 926	6 010 043	5 731 008	5 112 126	3 746 481
7. Derivatives - Hedge accounting	58 755	32 822	33 007	31 961	43 058
8. Fair value changes of the hedged items in portfolio hedge of interest rate risk	17 554	7 134	5 727	6 913	1 404
9. Investments in subsidiaries, joint ventures and associates	116 472	108 342	97 076	95 274	92 519
10. Tangible assets	43 292	44 477	24 800	24 924	23 141
11. Intangible assets	30 641	29 816	27 562	24 765	21 557
12. Tax assets	6 596	3 573	4 154	4 884	3 922
13. Other assets	17 649	18 117	21 434	30 133	29 087
14. Non-current assets and disposal groups classified as held for sale	232	398	285	419	856

„Commercial banking“ business

„Investment banking“ business

Source: www.cnb.cz, ARAD database

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Czech banking sector liabilities



	30.09.2020	31.12.2019	31.12.2018	31.12.2017	31.12.2016
Liabilities and equity, total	8 497 978	7 547 246	7 279 166	7 001 932	5 960 422
1. Liabilities, total	7 836 736	6 925 341	6 702 802	6 445 550	5 419 603
1.1. Financial liabilities held for trading	167 475	117 608	102 168	99 962	106 965
1.1.1. Derivatives	138 093	84 400	64 203	63 657	60 532
1.1.2. Short positions	12 103	10 913	32 153	28 530	27 731
1.1.3. Deposits	14 116	17 618	1 272	2 454	7 261
1.1.4. Debt securities issued	3 162	4 662	4 540	5 317	11 413
1.1.5. Other financial liabilities	1	15	2	4	28
1.2. Financial liabilities designated at fair value through profit	31 845	45 789	28 049	10 738	3 618
1.2.1. Deposits	4 586	3 557	1 935	1 240	1 997
1.2.2. Debt securities issued	27 257	42 231	26 114	9 498	1 620
1.2.3. Other financial liabilities	1	-	-	-	-
1.3. Financial liabilities measured at amortised cost	7 471 904	6 670 353	6 481 297	6 234 296	5 200 320
1.3.1. Deposits	6 668 703	5 815 494	5 686 440	5 439 621	4 504 183
1.3.2. Debt securities issued	748 415	806 256	762 162	759 975	670 338
1.3.3. Other financial liabilities	54 786	48 603	32 696	34 700	25 799
1.4. Derivatives - hedge accounting	52 885	35 459	33 500	32 348	26 809
1.5. Fair value changes of the hedged items in portfolio hedge	26 027	- 8 780	- 5 668	- 7 848	- 7 154
1.6. Provisions	14 113	13 113	14 777	12 749	12 282
1.7. Tax liabilities	1 995	3 372	2 706	2 928	7 002
1.8. Share capital repayable on demand	-	-	-	-	-
1.9. Other liabilities	70 491	48 427	45 973	60 377	55 454
1.10. Liabilities included in disposal groups classified as held	-	-	-	-	-
2. Equity, total	661 242	621 905	576 364	556 382	540 819
2.1. Capital	112 482	112 563	100 858	99 846	98 241
2.2. Share premium	59 264	59 264	63 763	63 421	62 646
2.3. Equity instruments issued other than capital	23 104	23 104	13 298	13 298	12 617
2.4. Other equity	2 387	2 285	1 688	2 883	1 538
2.5. Accumulated other comprehensive income	8 651	460	1 907	7 276	28 909
2.6. Retained earnings	343 857	263 313	251 779	239 321	213 093
2.7. Revaluation reserves	584	573	559	737	110
2.8. Other reserves	73 181	70 639	62 330	55 439	50 662
2.9. (-) Treasury shares	- 902	- 898	- 895	- 895	- 895
2.10. Profit or loss attributable to owners of the parent	38 634	91 121	81 426	75 354	73 898

„Commercial banking“ business

Source: www.cnb.cz, ARAD database

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Czech banking sector P/L



	30.09.2020	31.12.2019	31.12.2018	31.12.2017
Financial & operating income, net	136 866	202 177	190 399	179 177
1. Interest income	146 510	225 927	179 171	146 657
2. Interest expenses	49 233	80 179	49 417	34 561
3. Expenses on share capital repayable on demand	-	-	-	-
4. Dividend income	5 209	12 310	9 164	9 720
5. Fee and commission income	31 438	44 262	46 054	44 551
6. Fee and commission expenses	8 436	11 211	12 407	12 494
7. Gains or (-) losses on derecognition of financial assets and liabilities not	2 048	871	1 352	3 738
8. Gains or (-) losses on financial assets and liabilities held for trading, net	7 080	2 550	4 757	10 552
9. Gains or (-) losses on non-trading financial assets mandatorily at fair value	2 215	1 656	1 148	-
12. Exchange differences [gain or (-) loss], net	-	2 132	8 276	6 922
14. Other operating income	3 359	4 687	4 881	4 293
15. Other operating expenses	1 690	2 005	1 945	1 788
16. Administrative expenses	54 274	77 717	76 745	73 568
16.1. Staff expenses	32 133	43 581	41 076	38 304
16.2. Other administrative expenses	22 140	34 136	35 669	35 264
17. Cash contributions to resolution funds and deposit guarantee schemes	4 374	-	-	-
18. Depreciation	9 436	12 367	8 133	7 381
19. Modification gains or (-) losses, net	-	772	190	13
20. Provisions or (-) reversal of provisions	1 419	-	707	2 046
21. Impairment	20 086	3 818	5 679	6 479
PROFIT OR (-) LOSS BEFORE TAX FROM CONTINUING OPERATIONS	46 505	109 210	98 032	90 310
25. Tax expense or (-) income related to profit or loss from continuing operations	7 876	18 105	16 592	14 994
PROFIT OR (-) LOSS AFTER TAX FROM CONTINUING OPERATIONS	38 630	91 105	81 440	75 316
PROFIT OR (-) LOSS FOR THE YEAR	38 629	91 105	81 440	75 354

Source: www.cnb.cz, ARAD database

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Source of Interest income in recent years

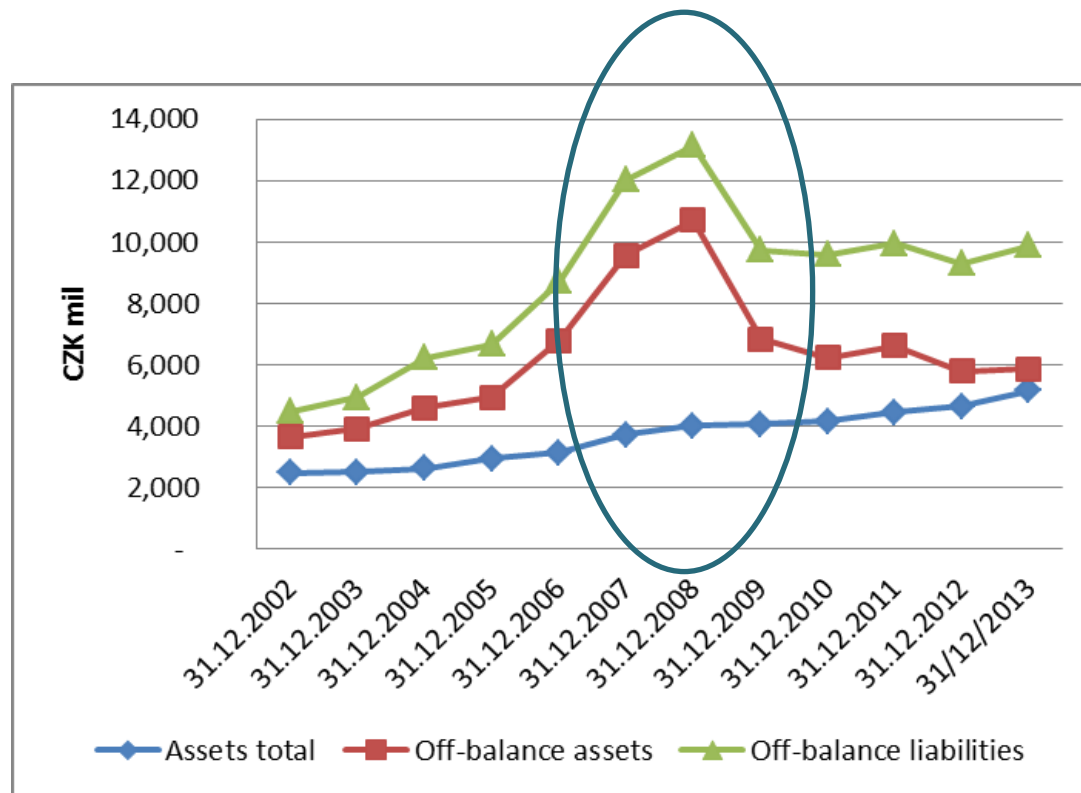


	30.09.2020	31.12.2019	31.12.2018	31.12.2017	31.12.2016
INTERESTS BY PRODUCT AND SECTOR					
3.1 Derivatives - trading	7 093	8 455	5 832	2 714	3 122
3.2 Debt securities	16 316	20 974	20 709	20 367	22 430
3.3 Loans and advances	103 577	167 588	132 787	103 844	104 259
3.3.1 Central banks	20 498	51 551	26 879	3 823	530
3.3.2 General governments	919	1 428	1 236	1 185	1 442
3.3.3 Credit institutions	1 864	3 495	3 006	2 238	2 603
3.3.4 Other clients	80 296	111 114	101 667	96 598	99 685
3.3.4.1 Other financial corporations	6 616	8 566	6 733	5 172	4 671
3.3.4.2 Non-financial corporations	28 370	43 154	37 422	33 286	33 709
3.3.4.3 Households	45 310	59 394	57 511	58 140	61 306

Corresponds with the development of the policy 2W repo-rate
 2012 – mid 2017 at 0,05 %
 Increase until 05/2019 reaching 2 %
 Since 11.5. 2020 back to 0,25 %



Off-balance sheet vs. Balance sheet



In the new reporting only loan commitments and guarantees are reported as part of off-balance sheet, so the size of „off-balance sheet“ has been dramatically - technically reduced since 2014 !!!

Source: www.cnb.cz

Note, that off-balance sheet assets do not have to equal off-balance sheet liabilities

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