The Greek NPE challenge

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The Greek NPE challenge

I. The decade long Greek crisis has left the financial sector injured and smaller

II. Profitability under pressure

III. Two major constraints on banks’ strategy and the NPE challenge

IV. Looking ahead: What is to be done?

*This presentation is based on: «*Κρίση και χρηματοπιστωτικά ανοίγματα στην Ελλάδα*», October 2020, forthcoming εκδόσεις Νομική Βιβλιοθήκη

I. The crisis transformed the Greek banking system

Domestic Greek Banking System	2009 (€bn)	2019 (€bn)	Δ%
Assets	447.151	261.388	-41.5%
(Share of 4 systemic banks)	71.9%	96.0%	
Loans	271.167	149.342	-44.9%
Deposits	279.544	182.112	-34.8%
CET1	29.367	29.071	-1.0%
(of which DTA or DTC)	1.100	15.901	
Pre-Provision Income	7.137	3.993	-44.1%
Nominal GDP	237.534	187.456	-21.1%

Source: Bank of Greece

Note: Domestic banking system, (€bn)

II.

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II. Pressures on European & Greek bank profitability

A. Common global pressures:

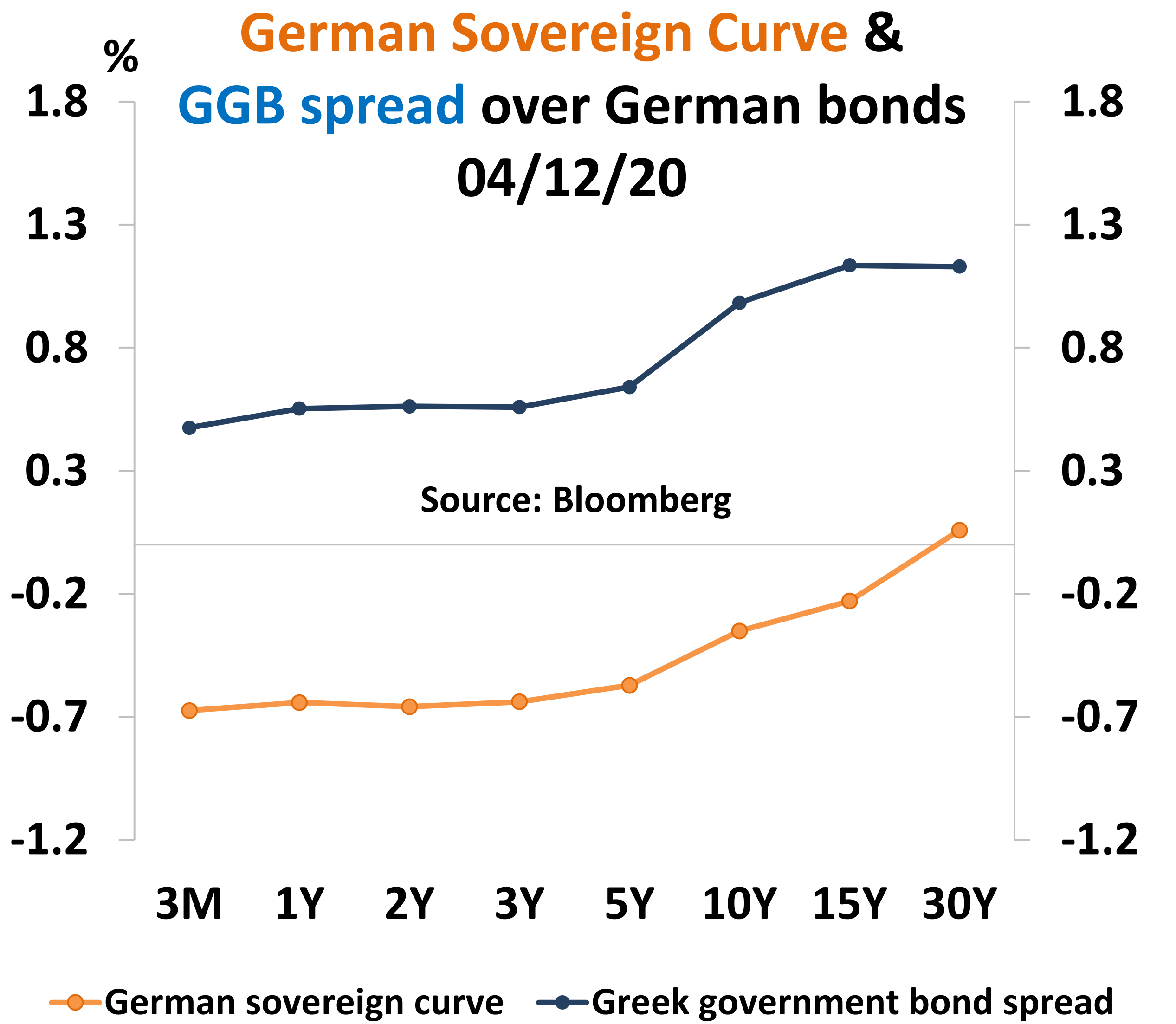
- ❑ The low interest rate environment
- ❑ Competition from Big Tech & Tech Fin
- ❑ Stricter regulation

B. Greek-specific extra pressures:

- ❑ Reduction in NPEs reduces interest income
- ❑ Digitalization of Greek economy → higher short-run costs
- ❑ Large customers seek alternative sources of funding
- ❑ Interest spreads on SME loans, reflecting higher Greek risk premia, can decline from competition by new entrants
- ❑ Retreat from abroad
- ❑ Personnel costs

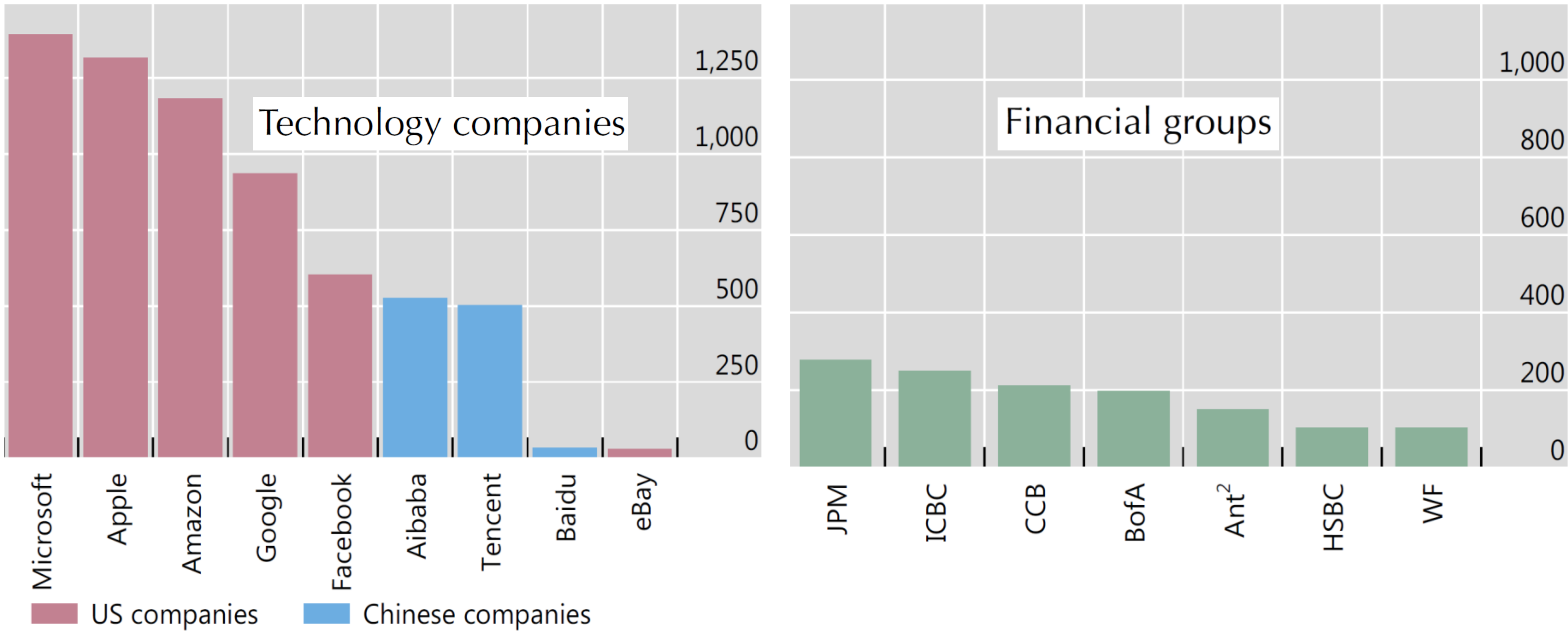
II.A Low global rates, negative risk-free rates in Europe

- Expansionary monetary policy (PEPP) since March 2020
- Negative risk-free rates in Europe
- Low rates are here to stay
- QE in Greece too
- Greek Spreads vs. Germany declined to historical lows



II.A Capitalization of Big Tech and Big Banks

Market capitalisation of BigTech, major financial groups (US$ billions)



Notes: Ant = Ant Financial; BofA = Bank of America; CCB = China Construction Bank; ICBC = Industrial and Commercial Bank of China; JPM = JPMorgan Chase; WF = Wells Fargo. 1) Stock market capitalization, 7 May 2020. 2) The estimated value of Ant Financial was derived from the amount raised in the company's 2018 funding rounds times the stakes sold.

Sources: Refinitiv Eikon; company reports.

Source: Elena Carletti, Stijn Claessens, Antonio Fatas and Xavier Vives, CEPR and IESE Banking Initiative, 2020, "The Bank Business Model in the Post Covid-19 World"

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III. Two major constraints and the NPE challenge

1) DTC forces banks to worry about negative profitability and the prospect of State capital injection, hence dilution of old shareholders

2) CET1 shortage and fear of capital increase, which would again dilute old shareholders

- Both constraints are hit (would be violated) by the need to reduce NPEs quickly

- The first constraint can be avoided the first time it occurs, via an accounting transformation (hive-down)

III. NPE reductions have consequences

EXAMPLE

Suppose

1) NPEs = €63.420 bn and banks wish to sell them or securitize them
2) Banks receive 30% on the sale, i.e., €19.026
3) Provisions (Stage 3 loans) = €27.910 bn

As a result:

Loss = - €63.420 + €19.026 + €27.910 = - €16.484

a) Loss is higher than Profitability (PPI) of €3.993, hence negative profits of – €12.491 bn, hence Greek State injects liquidity and receives shares. Thus, banks become nationalized
b) Immediate reduction in CET1 to €9.887 from €26.371, or to 7.40% of RWAs, hence without State intervention Regulator would require a capital increase

III. Hive down to the rescue from DTC

- "Hive down" was invented in 2018 as an accounting method to avoid the restrictions of DTC
- The Bank is split into NewCo and HoldCo
  - NewCo keeps all banking activities, the banking license, plus DTC
  - HoldCo keeps the NPLs to be securitized on its asset side plus capital on its liability side
- When securitization occurs, the loss is absorbed by HoldCo and DTC is not triggered because DTC belongs the NewCo
- Banks can only utilize hive-down once. A second securitization would trigger DTC
- Eurobank was the first to utilize the hive down it its €7.5 bn Cairo securitization. Without it, the State would own 35% of its shares from 1.3% today

III. Greek Systemic Banks, December 2019 data

Group data - December 2019 (€mn)	Eurobank	NBG	Alpha	Piraeus	Total	Eurobank post Cairo	Σύνολο post Cairo
1. Assets	64.761	64.248	63.458	61.231	253.699	63.427	252.364
2. Risk-Weighted Assets (RWAs)	41.407	36.900	47.483	45.410	171.200	39.385	169.178
3. Gross Loans	44.406	34.938	48.731	50.148	178.223	39.306	173.123
4. Non-Performing Exposures (NPEs)	13.000	10.939	21.827	24.470	70.236	6.184	63.420
NPEs over Gross Loans (%)	29,3%	31,3%	44,8%	48,8%	39,4%	15,7%	36,6%
5. Provisions	7.099	5.757	9.558	10.986	33.400	3.663	29.964
Provision-Coverage (Provisions / NPEs)	54,6%	52,6%	43,8%	44,9%	47,6%	59,2%	47,2%
Provisions for IFRS-9 stage 3 loans	6.556	5.282	8.877	10.631	31.346	3.120	27.910
6. Pre-Provision Income (PPI)	943	829	1.136	1.161	4.069	μ.δ	μ.δ
Net Interest Income	1.377	1.190	1.547	1.435	5.549	μ.δ	μ.δ
Net Fee & Commission Income	354	256	340	318	1.268	μ.δ	μ.δ
7. Tangible Equity	6.287	5.057	7.939	5.332	24.615	4.953	23.281
8. Core Equity Tier I (CET1)	6.917	5.966	8.495	6.732	28.110	5.178	26.371
CET1 / RWA s(%)	16,7%	16,0%	17,9%	14,8%	16,4%	13,1%	15,6%
Fully loaded (for IFRS-9) CET1 / RWAs (%)	14,6%	12,9%	14,9%	13,0%	13,9%	10,9%	13,0%
9. Deferred Tax Credit (DTC)	3.821	4.500	3.167	3.900	15.388	3.821	15.388
DTC / CET1 (%)	55,2%	75,4%	37,3%	57,9%	54,7%	73,8%	58,4%
Capital Cushion = Lines {8} + {5} – {4}	1.016	784	-3.774	-6.752	-8.726	2.657	-7.085
Texas Ratio = Lines {4} / [{8} + {5}] (%)	92,8%	93,3%	120,9%	138,1%	114,2%	69,9%	112,6%

III. What does it take to eliminate the full amount of NPEs?

Sensitivity analysis of capital needs – 4 systemic banks today

Capital deficit (-) or surplus (+) in €billion

Transfer Price of NPEs (% of Book Value)	Regulator's Target CET1 ratio						
0	6%	8%	10%	12%	14%	16%	18%
60%	20.9	18.2	15.5	12.9	10.2	7.5	4.9
50%	14.6	11.9	9.2	6.5	3.9	1.2	**-1.5**
40%	8.2	5.5	2.9	0.2	**-2.5**	**-5.2**	**-7.8**
30%	2.0	**-0.8**	**-3.5**	**-6.2**	**-8.8**	**-11.5**	**-14.2**
20%	**-4.5**	**-7.1**	**-9.8**	**-12.5**	**-15.2**	**-17.8**	**-20.5**
10%	**-10.8**	**-13.5**	**-16.2**	**-18.8**	**-21.5**	**-24.2**	**-26.9**
0%	**-17.2**	**-19.8**	**-22.5**	**-25.2**	**-27.9**	**-30.5**	**-33.2**

Based on Post-Cairo data of Dec 2019, source: Hardouvelis (2020) "*Greek Bank NPEs and the decade long crisis*"

- **Table assumes NPE elimination in 2020-Q1**
- **For realistic NPE elimination in 2022-Q1, we would have to also include:**
  - **Positive effect of Pre-Provision Income for 2 more years (€+6-8bn)**
  - **Negative effect of Covid on extra provisions due to NPEs (- €3bn)**
  - **Negative effect of IFRS-9 extra provisions (- €3.2 bn until 2023)**

III. Calculations of previous Table – An example

Negative numbers in earlier Table imply a capital need in €bn.
All post-Cairo NPEs of €63.420 are transferred in early 2020 using existing provisions of €27.910 for IFRS-9 stage-3 loans. Hence, the remaining clean balance sheets have provisions of €2.054 for the stage-1 and stage-2 loans.

Let us follow the example of

price = 30% and CET1/RWAs = 12%

- ✓ Transferring the NPEs implies a receipt of €19.026 = 30% X €63.420
- ✓ Capital loss= receipt €19.026 + provisions €27.910 – NPEs €63.420 = - €16.484
- ✓ New CET1 = old CET1 €26.371 – loss of €16.484 = €9.887
- ✓ New RWAs = old RWAs €169.178 – net loans[€63.429 – €27.910] = €133.668
- ✓ Minimum regulatory requirement for CET1 = 12% X €133.668 = €16.040

- ➢ Capital need = Existing post-transfer Capital – Required post-transfer Capital = €9.887 – €16.040 = - €6.153 or need of €6.2 bn, which is 4.6% of new RWAs

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IV. What should be done to improve the functioning of the Greek financial sector?

1) Improve the provision of bank credit to SMEs
2) Reduce the risk premium in interest rates charged to SMEs
3) Improve the functioning of the stock market
4) Improve oversight & transparency of large and small companies

✓ November 2020 proposals to the Greek Prime Minister by the **Pissarides Committee**:

- **Supervisory authorities to be separated into two groups: (a) Financial supervision, (b) Consumer protection**
- **Tax incentives for public listings, better governance rules**
- **Quick clearance of NPEs**
- **Establish specialized bankruptcy courts**

IV. What should be done to improve the functioning of the Greek financial sector?

✓ More details in a forthcoming 2021 Dianeosis essay:

A) Provide incentives to promote financial deepening & "inclusion" of non-bankable entities

- Enhance audit & internal control, increase the standards of financial reporting
- Improve corporate governance for SMEs
- Provide tax incentives and lower administrative cost to encourage "formalization" of business activity and offset transformation/compliance costs
- Promote digitization and substitution of inefficient B2B financing schemes
- Enhance & crystalize the electronic solvency register and combine with information from tax authorities, social security funds, banks and NPE management companies to establish a comprehensive credit scoring framework

IV. What should be done to improve the functioning of the Greek financial sector?

✓ More details in a forthcoming 2021 Dianeosis essay:

B) Addressing the deeper causes of Greece's financial system deficiencies :

- Incentivize business transformation, upscaling and M&A activity resolving bottlenecks
- Improve collateral recovery (digitalization, standardization, legal procedures)
- Align the supervisory quality and efficiency across financial market segments (reducing the asymmetry between the sophisticated bank supervisory and regulatory framework vs the fragmented standards applying to the rest of the financial system
- Enable (upon agreement with Supervisory authorities) a genuine forward-looking assessment of borrowers (changes in financial, prudential and credit risk management frameworks important to resolve legacy issues following the Greek & the Covid crisis)

Thank you for your attention!

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