Deutsche Bank
Research

Emerging Europe
Greece

Banking / Finance

Industry

Greek Banks

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Industry Update

A real alternative in the European sector?

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Key Changes

Company	Target Price	Rating
BOPr.AT	1.60 to 1.80	-

Source: Deutsche Bank

Steady positive signs against investors' negative bias

Despite Greek banks have outperformed the European Banks by c.25% YTD, mainly reflecting the strong recovery potential after the mass clean-up of legacy defaults, we believe they still remain off most investor's radar, probably due to the fact that people remain concerned about these banks to be more prone to collapse, as seen in the previous crisis. However, as we try to show through this report , it could even be the other way around, as the banks have already tackled a large restructuring and are now more solid (especially NBG and Eurobank) while Greece has shown a significant strength in its economy supported by stable government.

Profitability rising on the back of NII and controlled costs and CoR

Rising rates have boost NII and, despite likely being somewhat more short-lived than in other countries (given that loans reprice faster), volume growth in Greece is a clear winner and a rare driver to be found elsewhere in Europe, thereby supporting the revenues overall. As we show in detail, funding costs (both from deposits and wholesale) could be the main driver for some stabilisation by 2024. That said, overall returns are set to continue improving driven by overall revenues strength, costs control (still helped by further efficiency measures) and, especially, relatively limited impact on provisions thanks to resilient asset quality.

Testing structural resilience: ticking most of the boxes

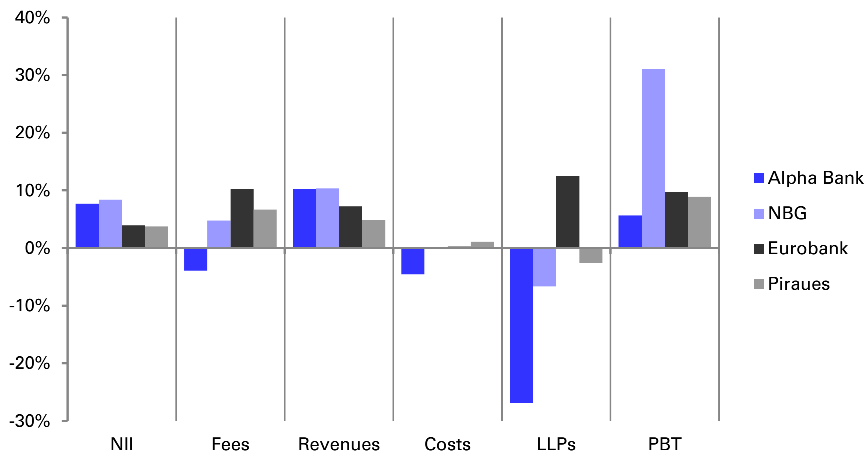
As aforementioned, fears on hit amid economic downturn seems the main investors' caveat on Greek banks, but we find that the bulk of the cleanup has either been executed or in the pipeline now. With single digit NPE ratios for the sector, we see that potential headwinds in the economy are set to lead to just slightly worse provisions forecast than our previous numbers (up by c.11% in '22 and c.7% in 2023 / 24E respectively, leading to CoR at 65bps in 2024). This seems manageable, with limited risk, especially for those banks with higher coverage (NBG and Eurobank). On the other side, capital does not look to be a threat anymore, with Piraeus being the main laggard, but enjoying a fast recovery. We find that pushbacks from DTCs still making up most of the capital guaranteed are quite unfounded, although we acknowledge that the only issue could be a potential drag on substantial dividends.

All in all, we maintain our recommendations, with NBG (Buy, TP E5.10) and Alpha Bank (Buy, E1.55) our picks, while Eurobank (TP E1.45) and Piraeus (TP E1.80 from E1.60) remain as a Hold.

Stocks' outperformance reflects convergence with peers

Greek banks put forth a strong performance in 3Q, with top-of-the-line beats in core revenue items also supported by still-resilient credit quality. On average, NII for the sector beat expectations by c.+6%, with Alpha and NBG posting the highest beats. Overall, Greek banks' revenue surpassed expectations by c.8% on average. On the other hand, expenses remained quite in line with expectations, and any concerns on cost of risk seem overdone looking at the quarter's asset quality performance, with no deterioration seen yet. In our view, this could be more of a phenomenon for 2023 (though contained and not reaching worst-case levels).

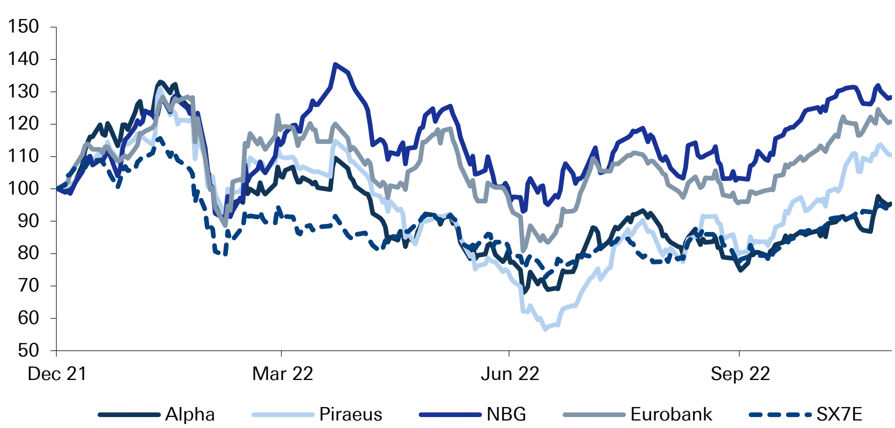
Figure 1: 3Q performance beat across the board



Source : Deutsche Bank estimates, company data; Eurobank's performance vs. DBe while others vs. consensus

While Greek banks' multiples are still below their European peers' average, it is clear that most of them have enjoyed a significant re-rating, especially our top-pick NBG, which YTD is c.35pp above the SX7E (Figure 2).

Figure 2: Stocks' YTD performance



Source : Bloomberg Finance LP

We believe there is a combination of different factors driving this performance, starting with good overall macroeconomic prospects, as Greece is set to maintain higher GDP growth than other EU countries. It also appears to be continuing to apply quite orthodox policies in its quest for debt control and the acceleration of debt payments to the EU. In addition, political stability looks more probable, despite the elections coming up in July 2023.

Furthermore, the banks' fundamentals are strengthening too, with profitability boosted by NII, which has benefitted from higher volumes and the pick-up in rates. Although the rates impact could be somewhat more short-lived than in other countries, strong volumes are currently difficult to find in any other place in Europe.

Greek banks have remained off investor's radar due to concerns on a new collapse, as seen in the previous crisis, but now they are much more solid (especially NBG and Eurobank)

Meanwhile, the main two concerns from the past are showing significant improvements, with asset quality converging to more normalised levels (although the NPL ratio is still c.5pp above the European average), and capital performing quite strongly (although NBG and Eurobank are likely overcapitalised, with the caveat of the large contribution from DTCs). We believe that Greek banks have remained off investor's radar as people remained too concerned about banks to be more prone to collapse, as seen in the previous crisis, when it could even be the other way around, as they have already tackled a large restructuring and are now more solid (especially NBG and Eurobank).

All in all, we confirm our view that Greek banks should not be disregarded by investors anymore, although their relatively small market caps make them slightly less accessible for large funds to invest in.

Lifting spirits with NII ... at least for some time

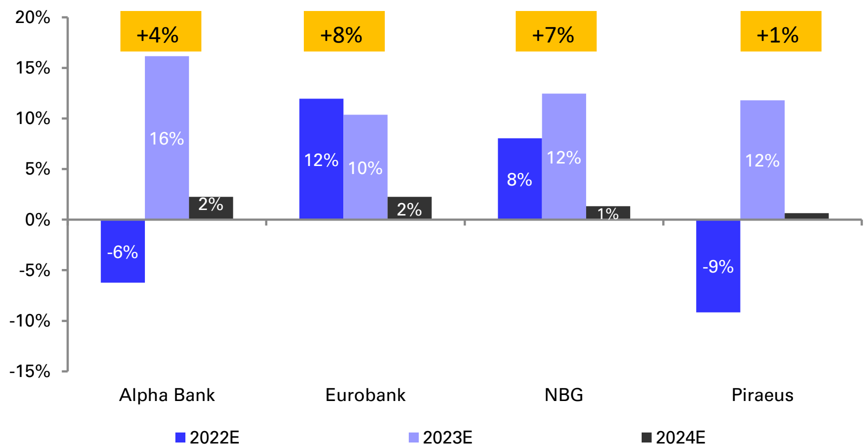
Greek banks are among the most sensitive to rates in Europe (not far off from Spain, Portugal and Italy), and offer an even faster take-up of rate hikes. However, the rates impact could be somewhat more short-lived than in other countries, given that loans reprice faster – in just about 3 months.

Rates impact could be somewhat more short-lived than in other countries, given that loans reprice faster, but higher lending growth is set to help

On a positive note, it is volume growth in Greece that is a clear winner (and a rare driver to be found elsewhere in Europe), thanks to the low levels of leverage, stronger economic growth and potential boost from the Recovery and ResilienceFund (RRF).

Hence, higher-than-expected rates should accelerate the banks' NII recovery, and the overall impact should be positive despite the removal of the TLTRO benefit.

Figure 3: NII growth YoY and CAGR (21-24E)



Source : Deutsche Bank estimates

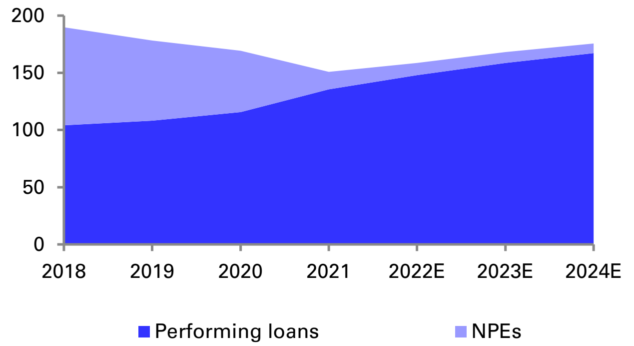
Loan growth set to be stronger than in other countries

One of our main potential concerns with regard to the current economic situation is the extent to which GDP growth could be affected and the impact of higher rates on credit demand. That said, economic growth forecasts for Greece remain strong – higher than in most other European countries – supported by the solid tourism recovery in 2022 and the deployment of the Recovery and Resilience Plan. GDP forecasts remain close to 6.0% for 2022, around 1% for 2023 and 2% for 2024 (as per the European Commission on 11 November 2022 link), although demand is likely poised to slow down as a result of rising prices, pressure from energy costs and general economic uncertainty.

However, despite the looming uncertainty, customer loans recorded a quarterly run rate of c.+3% in 3Q, higher than the 1% seen in 2Q22. We attribute this to overall lower leverage levels in Greece and still-compelling economic prospects in many sectors (e.g. tourism). We remain somewhat cautious as some pressure could be seen building up in 2023, but overall constructive due to the boost from RRF funds, the impact of which is likely to become visible in the next few quarters. Roughly speaking, the plan envisages investments and reforms totaling above E30bn up until 2026, with c.E18 billion to be financed from non-repayable financial support (grants) and the rest from loans. The expectations are that this could lead to a total new lending demand for banks of up to c.40% of the total amount, although we believe the impact will be lower and more concentrated in the final years of the program.

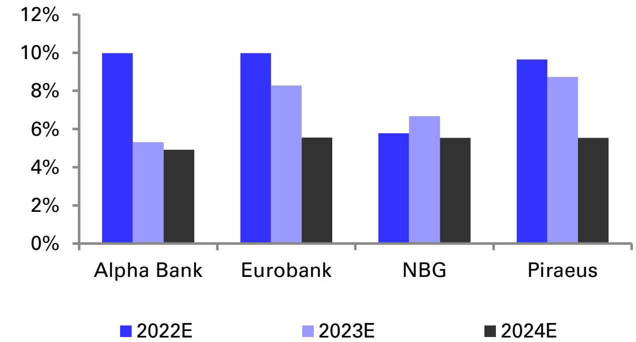
Furthermore (as shown in Figure 4 below), a decline in NPEs is no longer a factor in the drop in total loans.

Figure 4: Loans recovering after NPE cleanup (EUR bn)



* Aggregated loans of the four banks
Source : Deutsche Bank estimates, company data

Figure 5: Performing loans set to continue growing strongly (YoY %)



Source : Deutsche Bank estimates

Cost of deposits poses main risk (positive or negative) to NII outlook

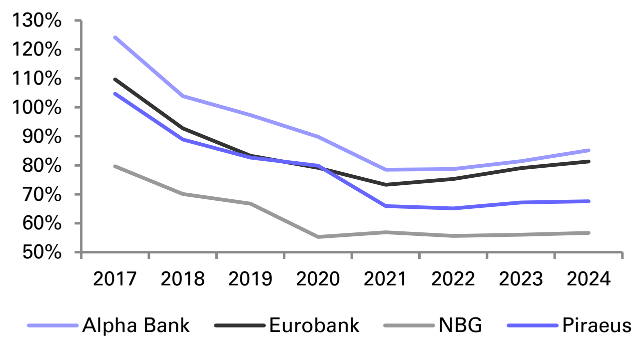
While we are confident in a strong recovery of interest income, we have mixed views regarding the impact of funding costs, which, in our view, could stave off some rate benefits. In this regard, the cost of deposits is clearly the main driver for NII future performance.

Cost of deposits is clearly the main uncertainty for NII future performance, although overall good liquidity could lead to lower betas than expected if competition remains rational

All in all, although deposit cost is set to increase as long as interest rates increase rapidly, the hikes already seen have had a negligible impact so far. Nevertheless, in spite of the pretty low deposit beta, Greek banks seem to remain quite cautious regarding the impact (even mentioning deposit betas of 70-80% going forward). We deem this as likely too negative, as we see several issues that could delay a faster pass-through of rates. Among these, we highlight:

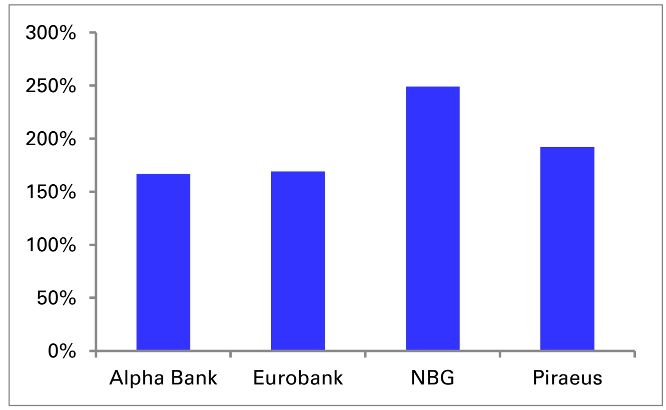
- The loan-to-deposits (LTD) ratio has declined substantially over the last few years, driven by deleveraging and increasing deposits books. As long as loan growth can be expected to remain strong, LTD should gradually increase, albeit still entailing significant liquidity excess (see Figure 6).
- Overall, liquidity remains strong for short-term requirements, with TLTRO III maturity being the main concern. In this regard (as shown in Figure 7), as of 3Q22 the LCR ratio remained quite high at most banks – especially NBG, which also has a low LTD ratio. In any case, we acknowledge that TLTRO maturity could become a challenge for some banks, with Alpha Bank being the most exposed to a liquidity shortage (if we consider the E13bn in TLTRO one of the main sources of liquidity). In this regard, Piraeus should be the second most affected. On the other hand, Eurobank, and especially NBG, should have no issues with significant excess liquidity after the TLTRO repayment. We view this event as the most likely trigger for a substantial increase in deposit costs and, therefore, we have remained cautious on deposit cost growth. However, if no signs of significant competition are seen and pass-through to clients remain low, we acknowledge that it could be a driver for NII outperformance.

Figure 6: LTD ratio remains low



Source : Deutsche Bank estimates, company data

Figure 7: LCR seems sufficient



Source : Company data as of 3Q22

Cost of wholesale funding remains a significant risk for NII too

In addition to deposits, we see a specific issue with Greek banks regarding the compliance with MREL requirements, as current access to markets is relatively limited (mostly senior debt and at very high costs, c.8-9% coupon).

Compliance with the compulsory requirements of MREL plus the countercyclical capital buffer (CCB) have to be reached by end-25, which should give enough time to partially meet the requirements through organic capital generation and manage any remaining gap through new issuances. Nevertheless, we believe there still may be an impact on NII.

Complying with MREL requirements can remain a challenge for Greek banks, leading to noticeable increase in the cost of funding

In the table below (Figure 8) we show the target to be reached, the bank's current position and, taking into consideration the capital that could be organicallygenerated, how much deficit should be closed through compliant issuances.

It should be borne in mind that the costs would be variable depending not only on the market's situation, but also on the relative access that each bank has to the markets (recall that Piraeus AT1s – the only Greek bank that has already issued this type of debt – reached yields close to 25% in the secondary market just some weeks ago). So far, it looks difficult that banks would try to issue more junior debt (in spite of Eurobank's just issued E300mn Tier 2), and thus they will need to mostly stick to some form of senior eligible bonds.

Surprisingly, given their higher capital generation capacity (partly driven by our lower expectations on dividend payments), the impact on NII could be higher for Eurobank and NBG if considering a similar cost of funding. That said, we would expect both banks to have a significantly lower cost to tap the markets than Alpha, or especially Piraeus.

Figure 8: Impact over NII of pending MREL issuances (as % of 2024 NII)

	Target *	3Q22 **	Deficit '25 (DBe)	Impact o/NII at average cost of: 8%	10%	12%
Alpha Bank	26.9%	20.3%	2%	4%	5%	6%
Eurobank	27.4%	22.0%	4%	8%	10%	13%
NBG	26.0%	20.0%	4%	9%	11%	13%
Piraeus	27.1%	19.4%	4%	7%	9%	11%

** MREL end-25 + CBR; ** Includes post- 3Q22 issuances in all Greek banks*
Source : Deutsche Bank estimates, Company data

Postcards from the past: is asset quality a threat?

It is difficult to not have a negative bias on the asset quality in Greece when considering where these banks have come from. However, the titanic cleanup effort is allowing them to converge to more normalised levels, despite their NPE ratio still being c.5pp above the European average.

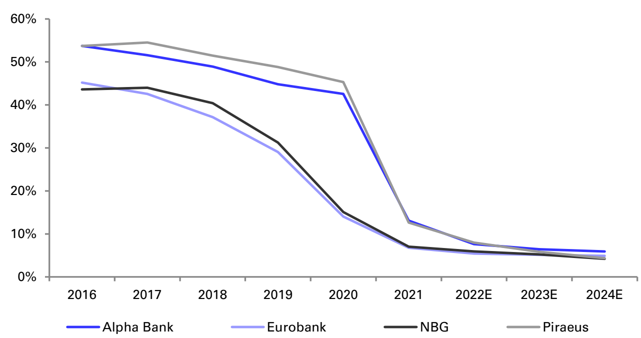
That said, the Greek banks' performance in 3Q22 showed that good momentum in NPL inflows persists, although messages on some potential deterioration (mostly in retail) confirms our view of a slowdown in recovery, probably partly offset by some further disposal deals or securitisations. Hence, provisions might not be much different in 2023 vs. 2022 (with 4Q22 probably somewhat higher than 3Q driven by macro model updates and some precautionary overlay).

A negative bias exits about asset quality in Greece given the outcome from the last crisis, but we believe the sector should be much more resilient to an upcoming deterioration of the economy

All in all, following commentary from the banks' managements, we see a bit more ofa cautious undertone from the messages, to the extent that banks such as Eurobank have revised up their CoR guidance by 5bps to 70bps for 2022. The rest of the peers, although leaving the CoR guidance unchanged, see some uptick in provisions in 2023. At this point, we can say that all banks are chasing higher coverage levels to weather the economic headwinds during and post the upcoming winters, meaning that any increase in CoR is precautionary and not necessarily Stage 3 provisions.

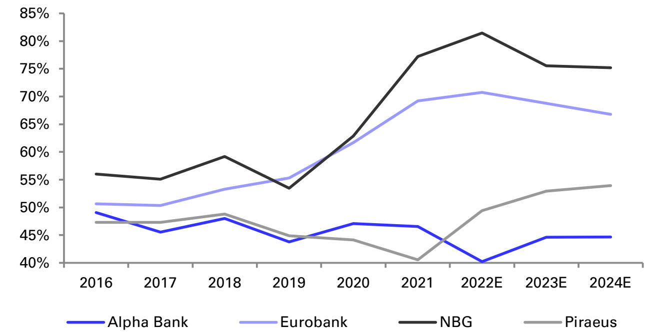
That said, there are factors that (overall) should still allow the NPE ratio to decline in 2023-24 (see Figure 9), as we expect some increase in new formation, offset by write-downs and sales (although at a smaller scale than in the past). The impact of maintaining higher-than-expected cleanup efforts should mean that provision efforts will likely exceed previous expectations. In this regard, we believe that higher levels of coverage (see Figure 10) remain a significant safeguard.

Figure 9: NPE ratios should maintain a slight downward trend



Source : Deutsche Bank estimates, company data

Figure 10: NPE coverage makes a difference among banks



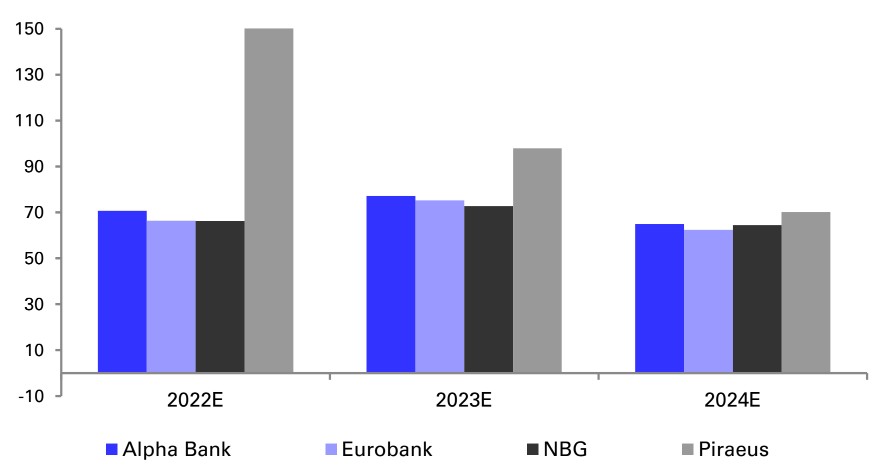
Source : Deutsche Bank estimates, company data

Higher coverage in NBG and Eurobank would allow a lower harsher-than-expected macro development could boost provisions significantly up, with a clear disadvantage for Alpha and Piraeus

We expect some convergence of coverage levels, but Eurobank (and especially NBG) should still be much more protected against any potential negative event. In the case of NBG and Eurobank, we expect slight declines from the current excessive levels – which, in any case, should be reflected in the lowest CoR among Greek banks. On the other hand, Piraeus and Alpha Bank are recovering from their lows after their ongoing cleanup processes. Over the last couple of years, asset quality has made remarkable progress and is on its way to single-digit NPE ratios (inching closer to normalised levels). This would result in higher coverage without pushing CoRsubstantially over through-the-cycle CoR, although there is still substantial uncertainty, and a harsher-than-expected macro development could boost provisions significantly up, with a clear disadvantage for Alpha and Piraeus.

Post our forecast revisions, CoR averages to 65bps by 2024 (slightly higher than before).

Figure 11: CoRs set to converge going forward, but still uncertain



Source : Deutsche Bank estimates, company data

Positive capital development, but stull cautious on dividend

Capital is performing quite strongly, with a notable recovery in those with low levels (especially Piraeus) and signs that organic generation should remain significant in spite of lending growth. However, messages on dividend remain cautious with regard to payouts, potentially due to worsening economic conditions. We note that a higher percentage of DTCs in capital has been one of the talking points among investors in the past, which is now no longer the case as it is not seen as a key hurdle in some shareholders' remuneration (although probably a burden for more aggressive policies in the future, in our view).

Enhanced capital, with some further improvement coming...

On the positive side, in 3Q the capital performance surpassed expectations in almost all banks except Alpha Bank, mainly due to organic generation in the quarter. In our view, the clean capital levels for Piraeus Bank (which remains the main laggard among Greek banks) are now inching above 11% faster than expected, thanks to rate-driven NII tailwinds. On the other side, Eurobank, and especially NBG, could start to be seen as overcapitalised.

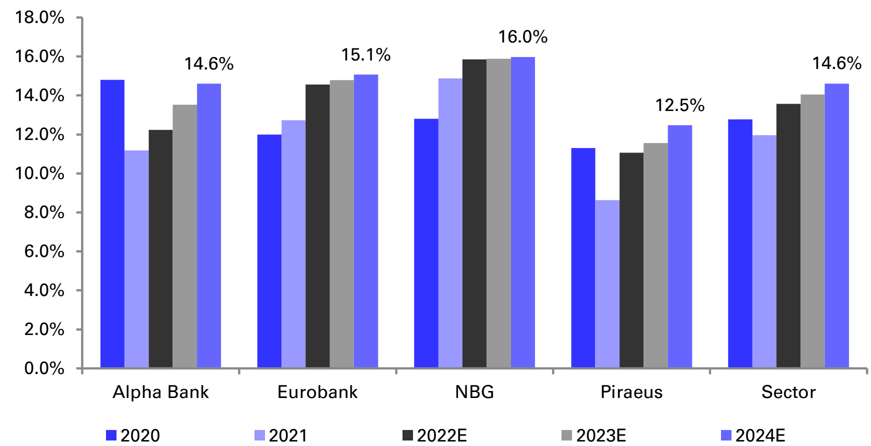
In any case, we believe that the recovery at Alpha Bank and Piraeus Bank are going to be significant. In fact, Piraeus has beaten our expectations by far for FY22 with its CET1 FL guidance of 11% by end-22 (whereas it was previously targeted for one year later), and we expect it to clearly exceed the 12% for 2024 stated in its business plan. That said, the current 10.7% as of 3Q22 likely makes it difficult for Piraeus to be among investors' preferences (we believe this concern is now mostly receding with a clear roadmap ahead). The next couple of quarters will be key to watch for developments in this space before it can be considered for re-rating.

Meanwhile, Alpha Bank is still enduring tough times, with a CET1 FL at just c.11.6%, but it should remain at more comfortable levels by 2023, probably exceeding 13% by 2023.

Overall, we expect profits and RWA growth to be the main drivers for changes in capital levels (except for the few pending NPEs and sales deals already known), as the impact on valuation reserves in mark-to-market bond portfolios is now set to be much less severe due to the reclassification of most portfolios at FVTOCI as amortised cost.

As a result, our estimates still reflect a substantial improvement in capital ratios, with banks with higher capital (NBG and Eurobank) ready to resume dividend payments against earnings for 2022 already, Alpha anticipating that action for 2023, and Piraeus also attempting to begin paying against 2023 as an aspiration (although we believe it might be a small amount).

Figure 12: CET1 FL improvements set to end with concerns over capital

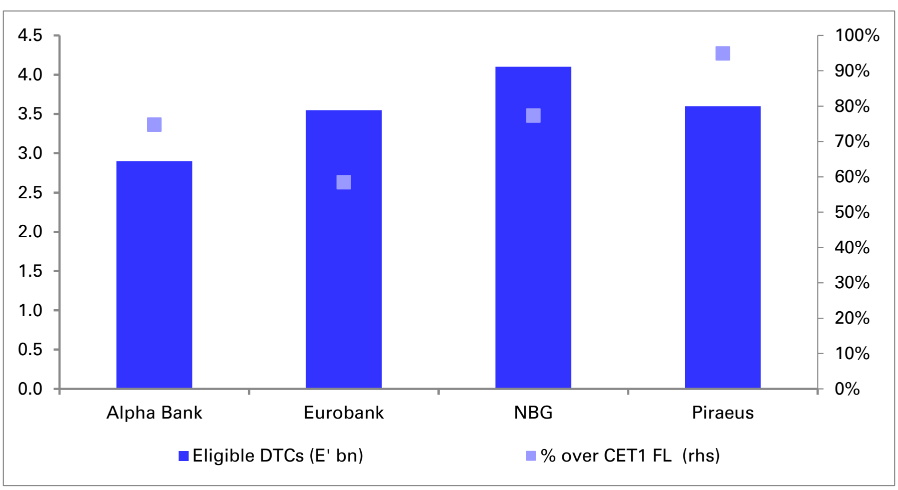


Source : Deutsche Bank estimates, company data

...with reliance on DTCs not an issue but likely limiting dividend

On capital, DTCs still make up most of the capital in Greek banks (Figure 13) as the different laws and amendments allowed for the losses from the restructuring and clean-up to be converted into regulatory capital.

Figure 13: DTCs still make up the bulk of CET1



Source : Company data, Deutsche Bank estimates

Although this could be seen as a potential negative or low-quality capital, the reality is that the EU regulation and Greek Laws allow these DTCs to be considered capital with full State Guarantee and not having any risk of being removed.

On the negative side, the mechanism of amortisation of these DTCs mean that their contribution should decline by close to 5% per year, which could mean some pressure on the absence of enough profits. However, it should be borne in mind that the amortisation of DTCs is limited by the existence of sufficient profit.

Overall, the "quality" of capital should improve in due time, as long as these DTCsgradually decrease; although as we have said before, the quality of capital coming from normal business should not be better or more secured than that which is State guaranteed.

DTCs still make up most of the capital in Greek banks, but we believe they are enough guaranteed and, overall, the only issue we find is how this could drag substantial capital return to shareholders

However, we see a potential side effect from this exposure to DTCs on dividend payments. We believe it is unlikely that Greek banks will be allowed to begin hefty dividend payments despite excess capital, as it would be using state guarantees to pay private investors. Our main assumption is that dividends will come just as a regular payout over profits, but not much more than that for several years at least. Hence, we would rule out any kind of special dividends or share buy-backs.

Still cheap but… are Greek banks a real alternative in the sector?

Positive trends continue in Greek banks, which now look mostly normalised or close to it. As we have explained throughout this report, it is difficult not to remain constructive, given the improvements in core revenues, the relatively limited concerns over asset quality and the developments in capital. Furthermore, while political instability and/or populist decisions regarding banks (e.g., the Spanish banking tax) are being seen in Italy and Spain, Greece has enjoyed stability and orthodox economic decisions that are contributing to the country's strong recovery.

In addition, Greek banks remain cheap in absolute terms and, from a local perspective, it is difficult to not believe that there might be a buying opportunity in any of them. However, it should be taken into account that the recentoutperformance has made it so that investors can count with roughly similarly cheap alternatives in other Southern European countries, which do not differ much in potential returns and multiples. This, coupled with the need of further delivery to dispel the negative bias that still exists, makes it difficult to expect that the outperformance could lead to a much more significant relative re-rating.

Greek banks remain cheap in absolute terms, although recent outperformance has made it so that investors can count with roughly similarly cheap alternatives in other Southern European countries. Further delivery could lead to a larger relative re-rating

This does not mean that we do not find these banks attractive enough, but we stick to favouring the most solid option at a reasonable price (NBG) and the best value on a risk-reward basis (Alpha Bank).

Despite the strong outperformance, we still find value in NBG (Buy, TP E5.10, unchanged) which is still a sensible choice given its outstanding capital and overall solid asset quality. This, coupled with the strong delivery in profit recovery, should make it the preferred choice for investors looking for significant profitability improvement coupled with limited structural risks.

In addition, we also continue to view Alpha Bank (Buy, TP E1.55, unchanged) as the best risk-reward option. Although still needing some further delivery to convince us completely, we believe that the poor stock performance vs. peers has paved the way for it to become a good medium-term choice, as delivery (and especially capital enhancement and NPE coverage) could gradually decrease potential concerns on the name.

We also note Eurobank (Hold, TP E1.45, unchanged) remains solid and better suited to endure a more negative economic situation than peers (except for NBG). Under normal circumstances, improvements should be set to continue on the back of

Greece's improvement, but also enjoying the support of its international businesses. Nevertheless, the upside potential remains limited, as it trades not far from many other names in southern Europe.

Piraeus (Hold, TP E1.80, up from E1.60) is probably the nicest surprise of late, as better profitability prospects from revenues, and especially increasing capital levels (though still far too low), have increased the appeal of the stock. Nevertheless, despite the meaningful improvements, we still believe it is the most binary choice in the country, as its capital may not be enough in case of a sudden deterioration of the economy. Such a scenario would probably not warrant a capital raise, but rather the need to sacrifice growth (and therefore profitability) to preserve capital.

Figure 14: Key valuation metrics

	Price			P/E			P/TNAV			Div. Yield			RoTE		
Company name	25-Nov-22	Target price	Reco.	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E
National Bank of Greece	3.82	5.10	Buy	3.8	5.7	5.4	0.59	0.54	0.49	2.7%	3.9%	5.9%	15.7%	9.4%	9.1%
Alpha Bank	1.04	1.55	Buy	16.5	4.8	4.3	0.43	0.40	0.38	0.0%	4.1%	7.0%	2.6%	8.4%	8.8%
Piraeus Bank	1.47	1.80	Hold	2.3	3.6	3.0	0.33	0.32	0.31	0.0%	4.5%	10.8%	14.3%	8.8%	10.4%
Eurobank	1.10	1.45	Hold	3.7	6.0	5.6	0.65	0.62	0.59	3.1%	3.2%	5.3%	17.9%	10.3%	10.6%

Source : Deutsche Bank estimates, Bloomberg Finance LP

Alpha Bank: Buy, TP E1.55

Fears can only be overcome by delivery

Not compelling yet, but guidance upgrades reflect better prospects

Alpha remains the only underperforming bank YTD in Greece, probably driven by having released some of the less compelling sets of results lately on the back of weak revenues, but also due to concerns about its capacity to endure economic deterioration as a result of low NPE coverage. Nevertheless, trends look solid and we believe improvements should come in line with expectations. We would highlight the following issues:

- **NII** strength (c.+12% QoQ in 3Q22 and c.+8% YoY) reflects the positive momentum from the increasing contribution of performing loans (driven by rates take-up and volume expansion) and securities portfolio. Despite the somewhat higher deposit costs and the removal of the extra TLTRO benefit, we are not surprised at all by the guidance upgrade for 2022 (to c.E1.3bn) and the strong prospects also expected for 2023. That said, as in the rest of the Greek banks, we believe an increase in funding costs (MREL, and especially deposits) could lead to a more muted performance by 2024, but still a bit above our previous expectations (Figure 15).
- On the other hand, our view on **fees** is more negative than before, due to the lower AuM commissions and an expected slowdown in cards and payments, which still remain very strong.
- That said, we believe that the main concern is still that there might be a risk of a higher deterioration in **CoR** than peers, given that NPE coverage remains the lowest (<39%). Hence, despite the good performance in NPEs lately, as long as we expect some increase in new inflows, we believe provisions should still remain significant. Actually, CoR guidance is now at 75bps for 2022 (vs.70bps previously) and Alpha guides for a similar level for 2023 (our numbers are around 80bps, still just slightly below 70bps by 2024).
- **Capital**, still at 11.6% CET1 FL (12.1% pro-forma of remaining transactions), is well below Eurobank's, and especially NBG's levels. However, we believe that improvements are set to continue, even in the short-term (Alpha has confirmed that it is planning two further securitisations in 2023, boosting capital by around +65bps). Consequently, our forecasts entail being at more-than-comfortable levels already by end 2023 (c.13.5% CET1 FL).

Reiterating our Buy rating and TP of E1.55/share

As a result of the aforementioned issues, we lower our 2022 earnings estimates by close to 11%, driven by provisions, which should be offset by stronger NII in 2023. In any case, improvements in returns should remain significant, as our numbers imply above 9% RoTE by 2024.

Figure 15: Alpha Bank – Forecast changes (E' mn)

	Old			New			New vs. old		
	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E
Net interest income	1,207	1,407	1,508	1,290	1,499	1,533	6.9%	6.5%	1.6%
Net fee and commission incom	410	411	437	397	393	409	-3.2%	-4.2%	-6.4%
Gross operating income	**1,818**	**1,935**	**2,067**	**1,976**	**2,008**	**2,047**	**8.7%**	**3.7%**	**-1.0%**
Operating costs	-978	-943	-912	-966	-972	-948	-1.3%	3.1%	3.9%
Pre provision profit	**839**	**993**	**1,155**	**1,010**	**1,036**	**1,099**	**20.3%**	**4.4%**	**-4.8%**
Provisions	-561	-292	-267	-743	-334	-292	32.5%	14.2%	9.2%
Operating profit pretax	**278**	**700**	**887**	**267**	**702**	**807**	**-4.1%**	**0.3%**	**-9.1%**
Net attributable profit	**419**	**497**	**630**	**372**	**498**	**573**	**-11.4%**	**0.3%**	**-9.1%**
EPS stated	**0.179**	**0.212**	**0.268**	**0.158**	**0.212**	**0.244**	**-11.4%**	**0.3%**	**-9.1%**
DPS	**0.00**	**0.04**	**0.08**	**0.00**	**0.04**	**0.07**	**NA**	**0%**	**-9%**
TNAVps	**2.47**	**2.62**	**2.77**	**2.44**	**2.59**	**2.73**	**-1%**	**-1%**	**-1%**
CET1 ratio	**12.2%**	**13.5%**	**14.8%**	**12.2%**	**13.5%**	**14.6%**	**6**	**4**	**-22**

Source : Deutsche Bank estimates

Given these forecasts, and taking into consideration slightly higher-than-expected capital as well as an increase in CoE to 12.5% (vs. 12.3% previously) due to a higher risk-free rate, our target price remains unchanged at E1.55/sh. Despite the probably not too compelling trends vs. peers, the bank still trades at a cautious 2023E P/E of 4.8x and a 2023E P/TBV of below 0.4x for an adjusted RoTE of 8.5%. Given the valuation discount and the significant improvements still expected in its business performance, we reiterate our Buy rating on Alpha Bank.

Figure 16: Alpha Bank – DDM valuation 2023E (E' / share)

	2023E
RoTE	8.5%
CoE	12.5%
"g"	1.5%
TBV /share	2.6
TP to TBV (RoTE-g)/(CoE-g)	0.63x
Discounted business value	**1.44**
Excess (deficit) capital	0.07
Discounted DPS	0.04
Target price (E' /share)	**1.55**

Source : Deutsche Bank estimates

Key downside risks include: 1) higher-than-expected costs for further balance-sheet cleanup; 2) weaker-than-expected economic performance, which could affect the need for provisions and negatively affect revenue growth; 3) pressure on NII from margins and funding costs could dent the profitability recovery; and 4) capital return may be delayed and lowered on the back of regulatory pressure stemming from DTA and RWA inflation.

Model updated: 25.11.2022

Running the Numbers

Europe
Greece
Banks

Alpha Bank

Reuters: ACBr.AT Bloomberg: ALPHA GA

Buy

Price as of 28 November	€ 1.02
Target price	€ 1.55
Company website	
http://www.alpha.gr	

Company Description

Alpha bank is mainly a retail bank with c.43% of revenues generated from retail business in Greece, while it also has its roots in corporate and commercial with c.30% of the revenues, 15% comes from its IB, asset management operations and other operations in Greece. Lending mix has highest proportion of corporate lending followed by mortgages, while term deposits and bonds score over the sight deposits. It has c.26% market share in lending, while the market share on deposits exceeds 21.4% in Greece.

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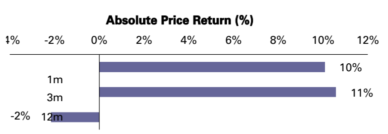
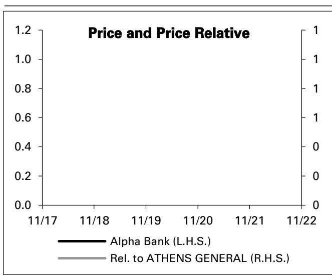
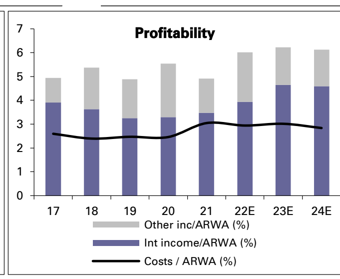
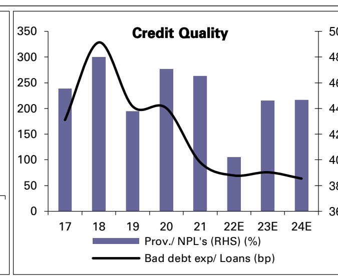


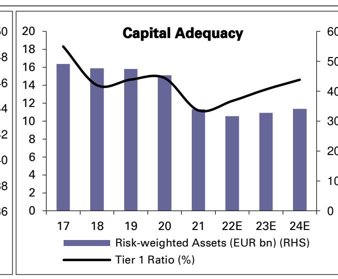
52-week Range:	€ 0.73 - 1.43
Market Cap (m)	EUR 2,399
	USD 2,493
Company identifiers	
Cusip	X0085P155
SEDOL	BZ1MXR7

Year Ending 31 December	2017	2018	2019	2020	2021	2022E	2023E	2024E
Data Per Share								
EPS (stated) (€)	0.01	0.03	0.07	0.07	-1.24	0.16	0.21	0.24
EPS (DB) (€)	0.09	0.07	0.11	0.14	-0.23	0.06	0.22	0.24
Growth Rate - EPS (DB) (%)	242.1	-23.4	63.4	23.5	-273.3	126.9	246.8	10.0
DPS (€)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BVPS (stated) (€)	6.21	5.25	5.47	5.39	2.57	2.64	2.78	2.92
Investment capital gains p. sh. (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tang. NAV p. sh. (€)	5.99	5.00	5.17	5.03	2.39	2.44	2.59	2.73
Market Capitalisation Y/E (EUR m)	2,757	1,697	2,967	1,473	2,528	2,399	2,399	2,399
Shares in issue (m)	1,543	1,543	1,543	1,544	2,347	2,347	2,347	2,347
Valuation Ratios & Profitability Measures								
P/E (stated)	160.6	32.0	28.2	14.2	-0.9	6.5	4.8	4.2
P/E (core DB)	20.4	16.4	17.6	7.1	-4.6	16.2	4.7	4.3
P/B (stated)	0.3	0.2	0.4	0.2	0.4	0.4	0.4	0.4
P/Tangible equity (DB)	0.3	0.2	0.4	0.2	0.5	0.4	0.4	0.4
ROE (stated) (%)	0.2	0.6	1.3	1.2	-40.5	6.1	7.8	8.6
RoTE (core tangible equity) (%)	1.5	1.2	2.2	2.6	-8.2	2.6	8.7	9.0
ROIC (invested capital) (%)	1.4	1.2	2.0	2.5	-7.7	2.4	8.1	8.4
Dividend yield (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dividend cover (x)	nm	nm	nm	nm	nm	nm	nm	nm
Simple free cash flow yield (%)	13.5	11.8	8.2	40.8	29.3	17.8	15.4	15.5
Profit & Loss (EUR m)								
Net interest revenue	1,943	1,756	1,547	1,527	1,376	1,290	1,499	1,533
Non-interest income	517	843	774	1,045	575	685	509	514
Commissions	323	331	340	332	400	397	393	409
Trading revenue	145	463	410	689	143	194	55	42
Other revenue	49	50	24	24	32	94	61	64
Total revenue	2,460	2,600	2,321	2,572	1,950	1,976	2,008	2,047
Total Operating Costs	1,293	1,158	1,175	1,142	1,208	966	972	948
Employee costs	474	464	459	429	400	372	368	379
Other costs	819	732	711	1,046	1,978	1,054	618	581
Pre-Provision profit / (loss)	1,167	1,441	1,147	1,430	742	1,010	1,036	1,099
Bad debt expense	1,005	1,723	995	986	373	283	320	280
Operating Profit	161	-320	156	111	-801	267	702	807
Pre-tax associates	0	0	0	0	0	0	0	0
Pre-tax profit	161	-320	156	111	-801	267	702	807
Tax	76	-342	51	10	-68	120	204	234
Minority shareholders	0	-30	0	0	0	0	0	0
Other post tax items	-68	0	0	3	-2,173	225	0	0
Stated net profit	**17**	**53**	**105**	**104**	**-2,906**	**372**	**498**	**573**
Reconciliation to DB adjusted core earnings								
Goodwill	0	0	0	0	0	0	0	0
Extraordinary & Other items	118	50	64	105	2,356	-224	14	-9
Bad Debt Provisioning	0	0	0	0	0	0	0	0
Investment reval, cap gains / losses	0	0	0	0	0	0	0	0
DB adj. core earnings	**135**	**103**	**169**	**209**	**-550**	**148**	**513**	**564**
Key Balance Sheet Items (EUR m) & CAPITAL RATIOS								
Risk weighted assets	49,100	47,635	47,483	45,369	33,967	31,687	32,755	34,076
Interest-earnings assets	50,918	49,733	51,283	52,173	50,465	54,012	56,316	58,463
Total loans	43,318	40,228	39,266	39,380	36,860	39,370	41,017	42,899
Total deposits	34,890	38,732	40,364	43,831	46,970	50,013	50,363	50,378
Stated Shareholder Equity	9,583	8,099	8,432	8,325	6,036	6,187	6,536	6,848
Tangible shareholders equity	9,237	7,709	7,983	7,770	5,601	5,739	6,087	6,400
Tier 1 capital	8,994	6,669	6,943	6,715	3,800	3,878	4,430	5,376
Tier 1 ratio (%)	18.3	14.0	14.6	14.8	11.2	12.2	13.5	14.6
o/w core tier 1 capital ratio (%)	18.3	14.0	14.6	14.8	11.2	12.2	13.5	14.6
Tangible equity / total assets (%)	15.2	12.6	12.6	11.1	7.6	7.5	8.0	8.4
Credit Quality								
Gross NPLs / Total Loans (%)	51.59	48.94	44.79	42.54	13.06	7.61	6.43	5.92
Risk Provisions / NPLs (%)	46	48	44	47	47	40	45	45
Bad debt chg / Avg loans (%)	1.78	3.28	2.04	2.01	0.95	0.70	0.76	0.64
Growth Rates & Key Ratios								
Growth in revenues (%)	3	6	-11	11	-24	1	2	2
Growth in costs (%)	6	-7	-2	26	61	-40	-31	-3
Growth in bad debts (%)	-14	71	-42	-1	-62	-24	13	-12
Growth in RWA (%)	-3	-3	0	-4	-25	-7	3	4
Growth in loans (%)	-2	-7	-2	0	-6	7	4	5
Growth in deposits (%)	6	11	4	9	7	6	1	0
Net int. margin (%)	3.69	3.49	3.06	2.95	2.68	2.47	2.72	2.67
Cost income ratio (%)	52.6	44.6	50.6	44.4	61.9	48.9	48.4	46.3
Total loans / Total deposits (%)	124	104	97	90	78	79	81	85









Source: Company data, Deutsche Bank estimates

Eurobank: Hold, TP E1.45

Bulking up at a good pace

Solid trends, but not much news

As in previous quarters, Eurobank maintained its strengthening pace in its performance, supported particularly by core revenues. While further upgrades in guidance (core operating profit) allow us to anticipate that RoTE at c. 11% is sustainable during 2022-24, and offers reassurance about overall strong prospects ahead, the lack of surprise and new catalysts is probably the main concern for the stock. We would highlight the following issues:

- Core revenues are improving led by **NII**, as the tailwinds, in the form of higher interest rates, strong volumes and bonds' contribution, led to a new outlook at +12-13% for 2022 (+7-8% in 2Q22). In spite of some pressure on spreads and increasing cost of funding, we still expect NII to grow by c.10% in 2023 and then almost stabilise by 2024, still supported by volume growth.
- At the same time, Eurobank has shown outstanding **fee** income performance, mostly stemming from lending activity. In spite of a potential slowdown, Eurobank is the only bank in Greece for which we substantially improve our estimates for 2023-24 (Figure 17) on the back of the resilience, in spite of the loss of the merchant acquiring fees. All in all, although large trading days are now over, recurrent revenues are set to continue giving support going forward.
- Structural resilience remains strong, as perceived risks in asset quality (NPE coverage already at 72.7% and now expected to drop to 70% by year-end vs. 64% previously) and good capital levels (CET1 expected at 14.2% by year-end) would make Eurobank less prone to suffering under a macro deterioration. As a result, although our prospects are now a bit higher regarding CoR, we would expect lower volatility than in peers (except than in NBG). Furthermore, with the CET1 FL ratio at c.15% by 2024, according to our estimates, risks look even more limited.

Hold maintained, with a target price of E1.45/share

We revise up our earnings estimates by 2%, 7% and 4% for 2022-24 respectively. Enhanced revenues should more than offset slightly higher costs and provisions, in our view. Our capital forecasts area also a bit better.

Figure 17: Eurobank – Forecast changes (E' mn)

Group	Old			New			Old vs new		
	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E
Net interest income	1,429	1,547	1,610	1,479	1,632	1,669	3.4%	5.5%	3.7%
Net fee and commission income	516	503	517	531	524	535	3.0%	4.1%	3.5%
Gross operating income	**2,568**	**2,118**	**2,201**	**2,644**	**2,226**	**2,280**	**3.0%**	**5.1%**	**3.6%**
Operating costs	-912	-939	-956	-918	-954	-966	0.6%	1.6%	1.1%
Pre provision profit	**1,656**	**1,179**	**1,245**	**1,727**	**1,273**	**1,313**	**4.2%**	**7.9%**	**5.5%**
Loan loss provisions	-273	-317	-291	-283	-346	-307	3.6%	9.2%	5.4%
Operating profit pretax	**1,354**	**851**	**956**	**1,404**	**906**	**997**	**3.7%**	**6.5%**	**4.3%**
Net income before disc. Ops	**1,071**	**630**	**708**	**1,102**	**672**	**739**	**2.9%**	**6.7%**	**4.4%**
Net attributable profit	**1,246**	**618**	**696**	**1,273**	**659**	**726**	**2.1%**	**6.6%**	**4.3%**
EPS stated	**0.34**	**0.17**	**0.19**	**0.34**	**0.18**	**0.20**	**2%**	**6.6%**	**4.3%**
DPS	**0.03**	**0.03**	**0.06**	**0.03**	**0.04**	**0.06**	**2%**	**6.6%**	**4.3%**
TNAVps	**1.65**	**1.73**	**1.81**	**1.66**	**1.75**	**1.83**	**0.5%**	**1.0%**	**1.3%**
CET1 ratio	**14.2%**	**14.6%**	**14.9%**	**14.6%**	**14.8%**	**15.1%**	**37bps**	**20bps**	**15bps**

Source : Deutsche Bank estimates

We retain our target price of E1.45/sh previously, as upgrades are limited by the increasing CoE (now at 12.5% due to risk-free rate, Figure 18). We see upside potential, but lower than in other banks in Greece, and maintain our Hold recommendation on valuation grounds as, overall, we believe that Eurobank's strengths are somewhat reflected in richer multiples, trading at c.6x 2023E P/E and 0.61x P/TBV for 2023E, and a RoTE of c.10.3%.

In our view, these multiples are not overly demanding, but they leave limited upside potential vs the multiples of some of the other Greek banks and are not far from many Southern European banks, which might look more obvious choices to invest in. Therefore, we maintain our Hold rating on Eurobank.

Figure 18: Eurobank – DDM valuation 2023E (E'/share)

	2023E
RoTE	10.4%
CoE	12.5%
"g"	1.9%
TBV /share	1.7
TP to TBV (RoTE-g)/(CoE-g)	0.80x
Discounted business value	**1.24**
Excess (deficit) capital	0.15
Discounted DPS	0.07
Target price (E' /share)	**1.45**

Source : Deutsche Bank estimates

Downside risks include: 1) weaker-than-expected economic performance in some of the regions, particularly Greece, could affect the need for provisions and negatively affect revenue growth; 2) pressure on NII from margins and funding costs could dent the recovery in profitability; and 3) capital returns may be delayed and lowered due to regulatory pressure on DTA and RWA inflation. Upside risks include: 1) a better-than-expected recovery in revenue growth on improving macro; 2) stronger lending demand than expected; 3) higher-than-anticipated rates resulting in better margins; and 4) improvement in the bank's contribution from international operations.

Model updated: 25.11.2022

Running the Numbers

Europe
Greece
Banks

Eurobank

Reuters: EURBr.AT Bloomberg: EUROB GA

Hold

Price as of 28 November	€ 1.07
Target price	€ 1.45
Company website	
https://www.eurobank.gr/en/	

Company Description

Eurobank operates in Greece and internationally with lending market share of 21.4% and deposit market share of 19.4%. It is the third-largest bank in terms of customer loans as at 1Q18. Greece contributes c.77% to the Group's revenues (2017), while international operations are split into four key geographies - Cyprus, Bulgaria, Serbia and Luxembourg. It has a headcount of c.13.5k as at 2017 in continuing operations, with c.70% staff employed in Greece.

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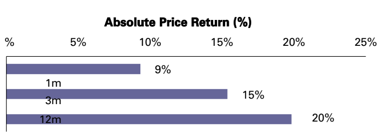
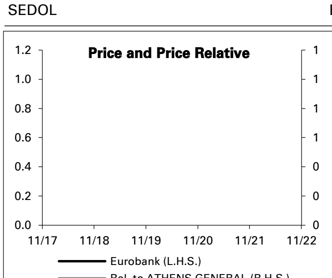
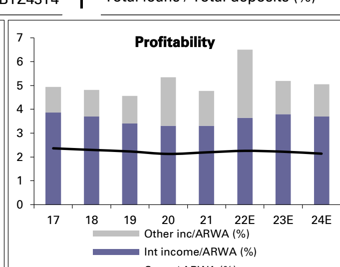
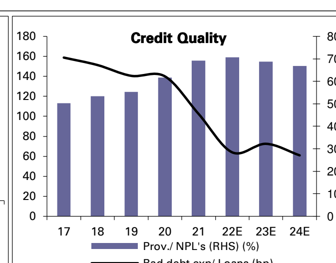


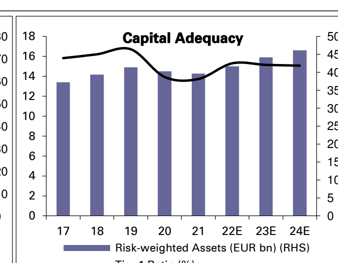
52-week Range:	€ 0.72 - 1.15
Market Cap (m)	EUR 3,980
	USD 4,135
Company identifiers	
Cusip	X2321W101
SEDOL	BYZ43T4

Year Ending 31 December	2017	2018	2019	2020	2021	2022E	2023E	2024E
Data Per Share								
EPS (stated) (€)	0.04	0.04	0.03	-0.33	0.09	0.34	0.18	0.20
EPS (DB) (€)	0.08	0.10	0.07	0.15	0.11	0.30	0.18	0.19
Growth Rate - EPS (DB) (%)	-20.4	19.7	-28.1	112.9	-22.4	159.7	-39.1	7.5
DPS (€)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BVPS (stated) (€)	3.25	2.28	1.80	1.43	1.54	1.74	1.83	1.91
Investment capital gains p. sh. (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tang. NAV p. sh. (€)	3.20	2.22	1.70	1.36	1.47	1.66	1.75	1.83
Market Capitalisation Y/E (EUR m)	1,858	1,180	3,412	2,146	3,306	3,980	3,980	3,980
Shares in issue (m)	2,186	2,186	3,709	3,709	3,709	3,709	3,709	3,709
Valuation Ratios & Profitability Measures								
P/E (stated)	19.9	13.0	26.9	-1.8	10.1	3.1	6.0	5.5
P/E (core DB)	10.6	5.6	13.3	3.9	7.8	3.6	5.9	5.5
P/B (stated)	0.3	0.2	0.5	0.4	0.6	0.6	0.6	0.6
P/Tangible equity (DB)	0.3	0.2	0.5	0.4	0.6	0.6	0.6	0.6
ROE (stated) (%)	1.4	1.5	2.2	-20.1	6.0	20.9	10.0	10.5
RoTE (core tangible equity) (%)	2.5	3.6	4.6	9.6	8.1	19.0	10.6	10.9
ROIC (invested capital) (%)	2.6	3.5	4.4	9.1	7.7	18.1	10.1	10.4
Dividend yield (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dividend cover (x)	nm	nm	nm	nm	nm	nm	nm	nm
Simple free cash flow yield (%)	23.1	-5.0	-1.4	39.1	17.2	20.2	7.4	10.9
Profit & Loss (EUR m)								
Net interest revenue	1,463	1,416	1,377	1,349	1,321	1,479	1,632	1,669
Non-interest income	408	429	466	831	584	1,166	594	611
Commissions	268	311	354	384	456	531	524	535
Trading revenue	140	133	58	433	93	658	65	71
Other revenue	0	-15	55	15	35	-24	6	6
Total revenue	1,871	1,845	1,844	2,181	1,904	2,644	2,226	2,280
Total Operating Costs	894	879	901	869	876	918	954	966
Employee costs	506	487	481	442	434	444	454	464
Other costs	430	373	429	446	467	513	521	512
Pre-Provision profit / (loss)	977	966	942	1,312	1,028	1,727	1,273	1,313
Bad debt expense	750	680	624	572	418	283	346	307
Operating Profit	185	305	310	721	585	1,404	906	997
Pre-tax associates	0	0	0	0	0	0	0	0
Pre-tax profit	185	305	310	721	585	1,404	906	997
Tax	9	94	53	174	162	302	233	258
Minority shareholders	0	0	0	0	-1	0	1	1
Other post tax items	-82	-120	-130	-1,753	-96	171	-12	-12
Stated net profit	**94**	**91**	**127**	**-1,207**	**328**	**1,273**	**659**	**726**
Reconciliation to DB adjusted core earnings								
Goodwill	0	0	0	0	0	0	0	0
Extraordinary & Other items	82	120	130	1,753	96	-171	12	-4
Bad Debt Provisioning	0	0	0	0	0	0	0	0
Investment reval, cap gains / losses	0	0	0	0	0	0	0	0
DB adj. core earnings	**176**	**210**	**257**	**546**	**424**	**1,102**	**671**	**722**
Key Balance Sheet Items (EUR m) & CAPITAL RATIOS								
Risk weighted assets	37,175	39,369	41,407	40,237	39,618	41,667	44,203	46,122
Interest-earnings assets	44,713	44,004	45,316	45,789	50,283	55,754	60,098	63,151
Total loans	37,108	36,232	37,365	37,424	38,967	42,607	46,138	48,707
Total deposits	33,843	39,083	44,841	47,290	53,168	56,569	58,414	59,935
Stated Shareholder Equity	7,104	4,989	6,665	5,315	5,705	6,455	6,783	7,074
Tangible shareholders equity	6,998	4,848	6,289	5,061	5,436	6,162	6,490	6,781
Tier 1 capital	5,691	5,284	5,998	4,828	5,044	6,065	6,538	7,748
Tier 1 ratio (%)	15.8	16.2	16.7	13.9	13.7	15.3	15.1	15.1
o/w core tier 1 capital ratio (%)	15.3	13.4	14.5	12.0	12.7	14.6	14.8	15.1
Tangible equity / total assets (%)	11.7	8.4	9.7	7.5	7.0	7.2	7.2	7.3
Credit Quality								
Gross NPLs / Total Loans (%)	42.55	37.13	29.05	14.05	6.80	5.41	5.11	4.90
Risk Provisions / NPLs (%)	50	53	55	62	69	71	69	67
Bad debt chg / Avg loans (%)	1.59	1.51	1.41	1.40	1.02	0.64	0.72	0.61
Growth Rates & Key Ratios								
Growth in revenues (%)	-9	-1	0	18	-13	39	-16	2
Growth in costs (%)	-17	-8	6	-2	1	6	2	0
Growth in bad debts (%)	-3	-9	-8	-8	-27	-32	22	-11
Growth in RWA (%)	-3	6	5	-3	-2	5	6	4
Growth in loans (%)	-5	-2	3	0	4	9	8	6
Growth in deposits (%)	-1	15	15	5	12	6	3	3
Net int. margin (%)	3.04	3.19	3.08	2.96	2.75	2.79	2.82	2.71
Cost income ratio (%)	47.8	47.6	48.9	39.8	46.0	34.7	42.8	42.4
Total loans / Total deposits (%)	110	93	83	79	73	75	79	81









Source: Company data, Deutsche Bank estimates

National Bank of Greece: Buy, TP E5.10

Setting the bar higher

Positive developments set to push profitability upwards

Quarter after quarter, NBG continues to beat expectations and to raise guidance, on the back of stronger activity, the positive impact from rates, good cost control and low provisions. While the stock has outperformed peers YTD, the strength of its balance sheet (both in coverage and capital) and overall strong performance, lead us to remain optimistic on the name. We would highlight the following issues:

- **NII** beats are not a surprise anymore, but the prospects for further contribution from performing loans, due to an uptick in NIM, bolstered by support from the fixed income portfolio, should more than offset headwinds from the drop in TLTRO contribution and increasing funding costs. Overall, we still see the solid performance continuing in 2023-24, as shown in the upward revision of our numbers (Figure 19) despite, as in the rest of Greek banks, our forecasting a more stable performance by 2024, once the bulk of the rates benefit is reflected in early 2023.
- On the other hand, we expect some stabilisation in **fee** income, as merchant acquiring JV will likely drag fees in 2023 and an economic slowdown might make lending and payments fees decline slightly vs. 2022. That said, overall core revenues are expected to continue to improve through 2023-24, in spite of the absence of the blockbuster trading gains seen in 1H22.
- Given the NPE coverage at 82% and NPE ratio down to c.6%, it seems that NBG is among the best prepared banks in Europe in terms of absorbing a potential deterioration in asset quality. We revise **provisions up slightly**, but mostly on the back of IFRS 9 impact, through macro model adjustment.
- Furthermore, 15.2% **CET1** FL (15.8% pro-forma of the merchant acquiring business deal in 4Q) gives a strong buffer to weather economic shocks. In any case, capital should be gradually channelled back to investors, with dividends starting against 2022 earnings, though in a moderate way.

Buy rating maintained with target price of E5.10/share

We increase our net profit estimate by c.10% for 2022, mainly as we adjust the NII for 2022 by 8% and a further c.2% for 2023, keeping it broadly untouched for '24. Strong revenues should more than offset slightly higher costs and provisions, in our view. Our capital forecasts are a touch better than before, reaching levels beyond optimal probably.

Figure 19: NBG – Forecast changes (E' mn)

	Old estimates			New estimates			New vs. old		
	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E
NII	1,232	1,405	1,441	1,309	1,472	1,492	6.2%	4.8%	3.5%
Fee income	338	357	378	343	343	357	1.5%	-4.1%	-5.7%
Trading and other income	448	2	7	466	-2	11	4.1%	-212.9%	71.0%
Total revenues	2,018	1,764	1,826	2,118	1,812	1,860	5.0%	2.7%	1.9%
Total costs	-787	-803	-805	-785	-819	-829	-0.2%	2.1%	3.1%
Pre provisioning profit	1,231	962	1,021	1,333	993	1,030	8.3%	3.3%	0.9%
Provisions	-222	-236	-225	-218	-252	-234	-1.5%	6.8%	4.1%
Profit before taxes	1,007	722	792	1,114	742	796	10.6%	2.7%	0.5%
Net profit underlying	842	597	654	929	606	651	10.3%	1.6%	-0.6%
Net profit	876	538	594	946	547	591	8.0%	1.8%	-0.6%
EPS (adjusted)	**0.91**	**0.65**	**0.71**	**1.00**	**0.66**	**0.71**	**10.1%**	**1.6%**	**-0.6%**
DPS	**0.19**	**0.15**	**0.23**	**0.10**	**0.15**	**0.23**	**-46.0%**	**1.8%**	**-0.6%**
TNAVps	**6.3**	**6.8**	**7.2**	**6.2**	**6.7**	**7.1**	**-1.3%**	**-1.1%**	**-1.1%**
CET1 ratio	**15.5%**	**15.5%**	**15.6%**	**15.8%**	**15.9%**	**15.9%**	**39**	**37**	**35**

Source : Deutsche Bank estimates

The bank's excess capital, coupled with a RoTE of c.9.3% by 2023 (unadjusted for excess capital) is a significant driver for our valuation, which yields a target price of E5.10/share, unchanged due to higher CoE as a result of a higher risk-free rate.

Although upside potential is now more limited, given recent outperformance, trading at c.6.5x P/E and below 0.6x P/TBV (both 2023E) still gives some room for rerating, given our view that it is a less risky choice among the four Greek banks (along with Eurobank). We thus maintain our Buy recommendation.

Figure 20: NBG – DDM valuation 2023E (E' / share)

	2023E
RoTE	9.3%
CoE	12.4%
"g"	1.7%
TBV /share	6.7
TP to TBV (RoTE-g)/(CoE-g)	0.71x
Discounted business value	**4.18**
Excess (deficit) capital	0.68
Discounted DPS	0.23
Target price (E' /share)	**5.10**

Source : Deutsche Bank estimates

Key downside risks include: 1) the state owns 40% and there is some overhang risk; 2) higher-than-expected costs for further balance-sheet clean-up; 3) weaker-than-expected economic performance, which could affect the need for provisions and negatively affect revenue growth; 4) pressure on NII from margins and funding costs could dent the profitability recovery; and 5) capital return may be delayed and lowered on the back of regulatory pressure stemming from DTA and RWA inflation.

Model updated: 25.11.2022

Running the Numbers

Europe
Greece
Banks

National Bank of Greece

Reuters: NBGr.AT Bloomberg: ETE GA

Buy

Price as of 28 November	€ 3.75
Target price	€ 5.10
Company website	
http://www.nbg.gr/	

Company Description

NBG is the largest Greek bank by assets, with a significant presence in banking and financial services and c.80% of profits coming from its local businesses. It employees c.8,500 staff and runs c.400 branches, of which more than 80% are in Greece.

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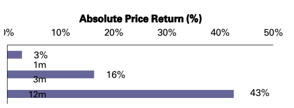
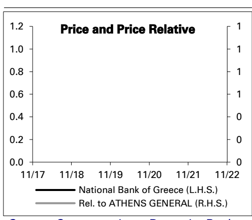
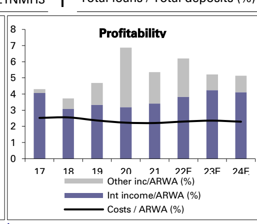
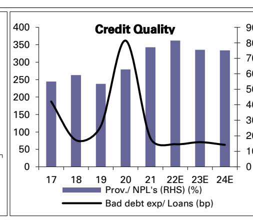


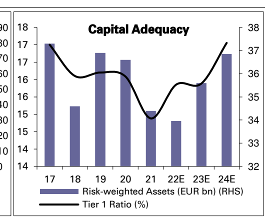
52-week Range:	€ 2.63 - 4.06
Market Cap (m)	EUR 3,430
	USD 3,563
Company identifiers	
Cusip	X56533171
SEDOL	BZ1NMH3

Year Ending 31 December	2017	2018	2019	2020	2021	2022E	2023E	2024E
Data Per Share								
EPS (stated) (€)	-0.03	-0.07	-0.29	0.04	0.95	1.03	0.60	0.65
EPS (DB) (€)	-0.02	0.04	0.45	0.64	0.89	1.00	0.66	0.70
Growth Rate - EPS (DB) (%)	-240.2	317.1	939.4	41.5	39.5	12.4	-34.4	5.9
DPS (€)	0.00	0.00	0.00	0.00	0.00	0.10	0.15	0.23
BVPS (stated) (€)	0.73	5.43	5.75	5.53	6.29	6.84	7.44	8.08
Investment capital gains p. sh. (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tang. NAV p. sh. (€)	0.72	5.26	5.53	5.22	5.90	6.40	7.00	7.65
Market Capitalisation Y/E (EUR m)	29,174	1,006	2,762	2,068	2,681	3,430	3,430	3,430
Shares in issue (m)	9,146	915	915	915	915	915	915	915
Valuation Ratios & Profitability Measures								
P/E (stated)	-97.3	-16.9	-10.5	54.0	3.1	3.6	6.3	5.8
P/E (core DB)	-159.2	25.3	6.7	3.5	3.3	3.7	5.7	5.4
P/B (stated)	4.4	0.2	0.5	0.4	0.5	0.5	0.5	0.5
P/Tangible equity (DB)	4.4	0.2	0.5	0.4	0.5	0.6	0.5	0.5
ROE (stated) (%)	-4.4	-1.0	-5.2	0.7	16.0	15.8	8.4	8.3
RoTE (core tangible equity) (%)	-2.7	0.7	8.4	11.9	16.1	16.3	9.8	9.5
ROIC (invested capital) (%)	-2.7	0.7	8.1	11.3	15.1	15.3	9.2	9.0
Dividend yield (%)	0.0	0.0	0.0	0.0	0.0	2.8	4.0	6.0
Dividend cover (x)	nm	nm	nm	nm	nm	10.0	4.0	2.9
Simple free cash flow yield (%)	1.7	21.7	2.1	45.1	50.6	28.7	10.0	12.8
Profit & Loss (EUR m)								
Net interest revenue	1,593	1,108	1,190	1,171	1,212	1,309	1,472	1,492
Non-interest income	92	234	486	1,355	691	809	340	368
Commissions	266	247	256	257	287	343	343	357
Trading revenue	-174	-13	230	1,098	405	466	-2	11
Other revenue	0	0	0	0	0	0	0	0
Total revenue	1,685	1,342	1,675	2,526	1,903	2,118	1,812	1,860
Total Operating Costs	988	918	846	819	784	785	819	829
Employee costs	582	575	511	480	434	416	422	431
Other costs	432	357	311	369	356	370	397	398
Pre-Provision profit / (loss)	697	424	830	1,707	1,119	1,333	993	1,030
Bad debt expense	792	299	408	1,072	265	218	252	234
Operating Profit	-120	111	444	604	848	1,114	742	796
Pre-tax associates	0	0	0	0	0	0	0	0
Pre-tax profit	-120	111	444	604	848	1,114	742	796
Tax	32	37	13	14	15	185	135	145
Minority shareholders	31	34	18	5	17	12	4	4
Other post tax items	-117	-99	-678	-547	51	28	-55	-56
Stated net profit	**-300**	**-60**	**-264**	**38**	**867**	**946**	**547**	**591**
Reconciliation to DB adjusted core earnings								
Goodwill	0	0	0	0	0	0	0	0
Extraordinary & Other items	117	99	678	547	-51	-28	55	47
Bad Debt Provisioning	0	0	0	0	0	0	0	0
Investment reval, cap gains / losse	0	0	0	0	0	0	0	0
DB adj. core earnings	**-183**	**40**	**414**	**585**	**817**	**917**	**602**	**638**
Key Balance Sheet Items (EUR m) & CAPITAL RATIOS								
Risk weighted assets	37,300	34,600	36,900	36,600	34,396	33,966	35,597	36,851
Interest-earnings assets	39,943	37,829	33,595	28,125	30,453	31,874	33,778	35,285
Total loans	32,067	30,134	29,222	26,807	30,439	32,078	34,276	36,081
Total deposits	40,265	43,027	43,748	48,504	53,493	57,642	61,219	63,832
Stated Shareholder Equity	6,696	4,962	5,259	5,059	5,750	6,255	6,802	7,393
Tangible shareholders equity	6,564	4,812	5,057	4,777	5,397	5,857	6,404	6,995
Tier 1 capital	6,341	5,571	5,978	5,887	5,118	5,384	5,654	6,284
Tier 1 ratio (%)	17.0	16.1	16.2	16.1	14.9	15.9	15.9	17.1
o/w core tier 1 capital ratio (%)	17.0	16.1	16.2	16.1	14.9	15.9	15.9	16.0
Tangible equity / total assets (%)	10.1	7.4	7.9	6.2	6.4	7.7	8.0	8.3
Credit Quality								
Gross NPLs / Total Loans (%)	44.00	40.42	31.26	15.10	7.01	5.92	5.20	4.20
Risk Provisions / NPLs (%)	55	59	53	63	77	81	76	75
Bad debt chg / Avg loans (%)	1.87	0.76	1.17	3.62	0.82	0.65	0.71	0.63
Growth Rates & Key Ratios								
Growth in revenues (%)	-25	-20	25	51	-25	11	-14	3
Growth in costs (%)	-24	-8	-12	3	-7	-1	4	1
Growth in bad debts (%)	3	-62	36	163	-75	-18	15	-7
Growth in RWA (%)	-9	-7	7	-1	-6	-1	5	4
Growth in loans (%)	-10	-6	-3	-8	14	5	7	5
Growth in deposits (%)	0	7	2	11	10	8	6	4
Net int. margin (%)	3.86	2.85	3.33	3.79	4.14	4.20	4.48	4.32
Cost income ratio (%)	58.6	68.4	50.5	32.4	41.2	37.1	45.2	44.6
Total loans / Total deposits (%)	80	70	67	55	57	56	56	57









Source: Company data, Deutsche Bank estimates

Piraeus Financial Holdings: Hold, TP E1.80

Compelling developments

Gradually leaving the capital "red zone" with supportive delivery

Despite the miss on profit expectations in 3Q22, Piraeus continues to show better underlying trends, not greatly different from the rest of the banks in Greece. While significant loan growth and rates are boosting NII, we are a bit more worried going forward about funding costs than in peers, specially on wholesale. With overall good prospects for 2023-24, the main driver for the stock performance should be further improvements in capital levels, still subpar but with significant improvement. We would highlight the following issues:

- Piraeus' **NII** strong performance lately has been driven by higher loan balances (already beating the target for FY22 in 3Q22), but also yields, further boosted by income from the bond portfolio. These positives are still more than offsetting the negatives from the TLTRO drop and the slight increase in funding costs. However, as we explained in the general section of this report, increasing funding costs are set to be a significant drag, with Piraeus having significantly higher wholesale funding costs than peers. That should lead to difficulties in continuing to grow NII in a significant way going forward.
- **Costs** are likely to remain a bit more under control than in most peers, in spite of inflation, thanks to the ongoing restructuring efforts. That said, one-offs have still been a burden and this will likely continue in 4Q22 and '23.
- **NPE** clean-up continued in the quarter, but remains a bit too high (NPE ratio at 8.7%), especially considering that an economic slowdown and higher rates could lead to increasing NPE inflows (partly offset by some more deals, including synthetic securitisations of performing loan portfolios). On the other hand, coverage remains low (49%), despite some improvement lately (it was just above 40% by end-21), which could entail higher CoR than banks like Eurobank and NBG, which hold a much higher buffer.
- **Capital** remains the elephant in the room, as CET1 FL at 10.7% remains too low for many investors, despite it climbing by 116bps in 3Q22 and should be above 11% at year-end. While the bank continues its trend to normalisation (we forecast CET1 FL at 12.5% by end-24), the main question mark here remains whether the bank should sacrifice loan growth to generate more capital at the expense of lower profits.

We maintain our Hold rating, with revised target price of E1.80/share

We change our underlying earnings forecasts materially in 2022-23 (c.8% and 12% respectively) and leave them just slightly changed by 2024. The drivers are mainly related to NII tailwinds initially, later offset by funding costs, inflation impact and higher provisions. Positively, organic generation has led to an improvement in the CET1 development.

Figure 21: Piraeus – Forecast changes (E' mn)

	Old estimates			New estimates			New vs. old		
	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E
NII	1,227	1,369	1,446	1,281	1,432	1,441	4.3%	4.6%	-0.4%
Fee income	443	449	470	446	451	457	0.6%	0.4%	-2.7%
Trading and other income	735	48	50	804	119	120	9.4%	151.1%	138.8%
Total revenues	**2,405**	**1,866**	**1,967**	**2,530**	**2,002**	**2,018**	**5.2%**	**7.3%**	**2.6%**
Total costs	**-843**	**-824**	**-826**	**-871**	**-842**	**-831**	**3.2%**	**2.2%**	**0.6%**
Personnel costs	-385	-370	-365	-416	-389	-381	8.0%	5.2%	4.5%
Administrative costs	-355	-353	-357	-350	-351	-344	-1.2%	-0.6%	-3.5%
Depreciation	-104	-102	-105	-105	-103	-106	0.6%	1.3%	1.2%
Pre provisioning profit	**1,562**	**1,042**	**1,140**	**1,660**	**1,160**	**1,187**	**6.3%**	**11.3%**	**4.1%**
Provisions	-664	-363	-279	-634	-405	-305	-4.5%	11.6%	9.3%
Other impairments	-31	-36	-32	-41	-36	-36	32.7%	0.0%	12.5%
Profit before taxes	**860**	**647**	**833**	**977**	**723**	**850**	**13.6%**	**11.7%**	**2.0%**
Taxes	-90	-157	-158	-143	-175	-187	59.4%	12.0%	18.1%
Net profit underlying	**770**	**491**	**675**	**834**	**548**	**663**	**8.3%**	**11.7%**	**-1.8%**
Net attributable profit stated	**713**	**436**	**655**	**809**	**493**	**643**	**13.4%**	**13.1%**	**-1.8%**
EPS underlying	**0.62**	**0.39**	**0.54**	**0.67**	**0.44**	**0.53**	**8.4%**	**11.7%**	**-1.8%**
DPS	**0.00**	**0.059**	**0.162**	**0.00**	**0.07**	**0.16**	**NA**	**11.7%**	**-1.8%**
TNAVps	**4.3**	**4.4**	**4.6**	**4.4**	**4.5**	**4.7**	**2.5%**	**3.4%**	**3.1%**
CET1 ratio	**10.9%**	**11.4%**	**12.3%**	**11.1%**	**11.6%**	**12.5%**	**16**	**17**	**16**

Source : Deutsche Bank estimates

Overall, the good performance of the stock lately seems to reflect that confidence on Piraeus being able to catch up with peers with regard to the normalisation of its profile. We believe the compelling advances toward asset quality clean-up and a profitability recovery for 2023-24 should help, although its scarce capital levels and low coverage leave the door open for significant asymmetry in the final outcome. Our target price of E1.80 (vs E1.60 previously) reflects a RoTE of just below 8% (after deducting AT1s' cost) in 2023. The negative impact on the bank's valuation from low capital and a higher cost of equity, makes the current multiples of c.4x 2023E P/E, 0.33x 2023E P/TBV probably insufficient in relative terms vs some other Greek banks that are also cheap and carry much lower risk. Therefore, we maintain our Hold recommendation on the stock.

Figure 22: Piraeus – DDM valuation 2023E (E' / share)

	2023E
RoTE	7.9%
CoE	12.8%
"g"	1.5%
TBV /share	4.5
TP to TBV (RoTE-g)/(CoE-g)	0.57x
Discounted business value	**2.25**
Excess (deficit) capital	-0.50
Discounted DPS	0.06
Target price (E' /share)	**1.80**

Source : Deutsche Bank estimates; Note: Stated RoTE after deducting AT1 coupon

Downside risks include: 1) higher-than-expected costs for further balance sheet clean-up; 2) weaker-than-expected economic performance could affect the need for provisions and negatively affect revenue growth; 3) pressure on NII from margins and funding costs could dent the recovery of profitability; and 4) a potential need to raise capital in the event of regulatory headwinds or deterioration of the macroeconomic environment. Upside risks include: 1) faster acceleration in the disposal of NPEs reinforcing the bank's coverage ratios and overall improving profitability outlook; 2) stronger lending demand than expected on recovering macro and gaining additional market share; 3) higher-than-anticipated rates improving asset margins; and 4) solid build-up of the capital stack, closing the gap with peers.

Model updated: 25.11.2022

Running the Numbers

Europe
Greece
Banks

Piraeus Bank

Reuters: BOPr.AT Bloomberg: TPEIR GA

Hold

Price as of 28 November € 1.43
Target price € 1.80

Company website
http://www.piraeusbankgroup.com/en

Company Description

Piraeus Bank operates mostly local business (97% of total loans) after a strong reduction of its international presence. It employs more than 9,000 employees at the group's continued operations. With c.E80bn in assets, it is the second-largest Greek bank, with corporates as its main business sector, followed by mortgages.

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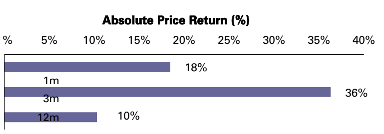
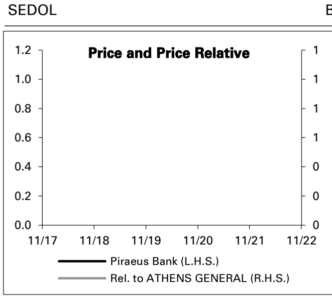
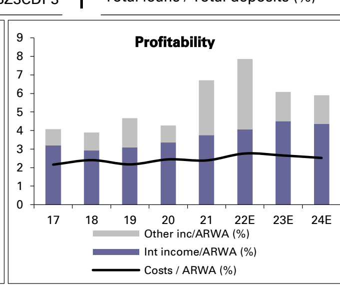


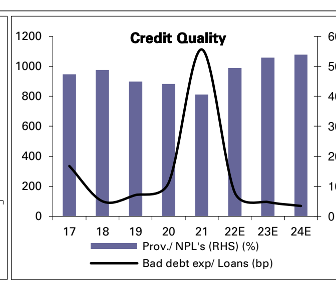
52-week Range: € 0.73 - 1.69
Market Cap (m) EUR 1,786
USD 1,856

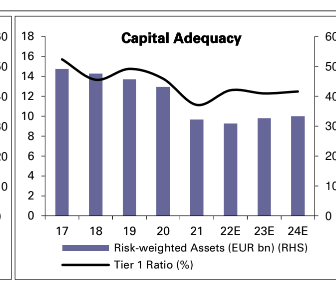
Company identifiers
Cusip X06397222
SEDOL BZ3CDP3

Year Ending 31 December	2017	2018	2019	2020	2021	2022E	2023E	2024E
Data Per Share								
EPS (stated) (€)	-0.47	-0.39	0.63	-1.53	-2.41	0.65	0.39	0.51
EPS (DB) (€)	-0.03	0.40	0.61	-1.51	-2.44	0.63	0.40	0.49
Growth Rate - EPS (DB) (%)	32.4	1,454.0	53.6	-347.2	-61.7	125.6	-36.6	23.2
DPS (€)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BVPS (stated) (€)	16.90	12.25	12.87	11.47	4.15	4.61	4.76	4.95
Investment capital gains p. sh. (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tang. NAV p. sh. (€)	21.17	16.52	17.14	15.74	4.43	4.87	5.03	5.21
Market Capitalisation Y/E (EUR m)	22,119	6,052	21,543	9,366	1,613	1,786	1,786	1,786
Shares in issue (m)	437	437	437	437	1,250	1,250	1,250	1,250
Valuation Ratios & Profitability Measures								
P/E (stated)	-108.1	-35.6	78.1	-14.0	-0.5	2.2	3.6	2.8
P/E (core DB)	-1,727.8	34.9	80.9	-14.2	-0.5	2.3	3.6	2.9
P/B (stated)	3.0	1.1	3.8	1.9	0.3	0.3	0.3	0.3
P/Tangible equity (DB)	2.4	0.8	2.9	1.4	0.3	0.3	0.3	0.3
ROE (stated) (%)	-2.7	-2.7	5.0	-12.6	-59.0	14.7	8.4	10.6
RoTE (core tangible equity) (%)	-0.1	2.1	3.6	-9.2	-49.1	13.4	8.0	9.5
ROIC (invested capital) (%)	-0.1	2.0	3.5	-8.8	-47.0	12.8	7.6	9.1
Dividend yield (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dividend cover (x)	nm	nm	nm	nm	nm	nm	nm	nm
Simple free cash flow yield (%)	1.7	1.9	3.0	-3.4	-36.9	51.8	16.7	28.9
Profit & Loss (EUR m)								
Net interest revenue	1,639	1,410	1,435	1,486	1,410	1,281	1,432	1,441
Non-interest income	449	472	739	407	1,120	1,199	500	507
Commissions	331	339	318	317	438	446	451	457
Trading revenue	119	133	421	90	682	753	49	50
Other revenue	0	0	0	0	0	0	0	0
Total revenue	2,088	1,882	2,174	1,893	2,530	2,479	1,932	1,948
Total Operating Costs	1,106	1,161	1,013	1,084	899	871	842	831
Employee costs	546	616	504	571	405	416	389	381
Other costs	711	669	576	731	550	445	419	416
Pre-Provision profit / (loss)	983	721	1,161	809	1,631	1,609	1,090	1,117
Bad debt expense	2,020	532	710	1,104	4,284	634	405	305
Operating Profit	-1,188	65	384	-514	-2,709	985	719	846
Pre-tax associates	-31	15	5	-16	18	-8	4	4
Pre-tax profit	-1,219	80	389	-530	-2,691	977	723	850
Tax	-1,207	-93	123	128	316	143	175	187
Minority shareholders	0	0	0	0	0	0	0	0
Other post tax items	-192	-343	10	-10	0	-27	-55	-20
Stated net profit	**-205**	**-170**	**276**	**-668**	**-3,008**	**807**	**493**	**643**
Reconciliation to DB adjusted core earnings								
Goodwill	0	0	0	0	0	0	0	0
Extraordinary & Other items	192	343	-10	10	-39	-26	3	-33
Bad Debt Provisioning	0	0	0	0	0	0	0	0
Investment reval, cap gains / losses	0	0	0	0	0	0	0	0
DB adj. core earnings	**-13**	**173**	**266**	**-658**	**-3,047**	**781**	**495**	**610**
Key Balance Sheet Items (EUR m) & CAPITAL RATIOS								
Risk weighted assets	49,128	47,554	45,688	43,097	32,207	30,891	32,606	33,359
Interest-earnings assets	67,417	61,880	61,231	71,576	93,058	85,327	79,195	81,626
Total loans	44,720	39,757	39,162	39,624	36,521	38,493	41,265	43,194
Total deposits	42,715	44,739	47,351	49,636	55,442	59,115	61,432	63,843
Stated Shareholder Equity	7,378	5,350	5,619	5,007	5,188	5,758	5,957	6,188
Tangible shareholders equity	9,243	7,214	7,486	6,874	5,536	6,087	6,285	6,517
Tier 1 capital	5,535	4,903	5,313	4,738	3,306	3,967	4,341	4,759
Tier 1 ratio (%)	15.7	13.6	14.7	13.8	11.1	12.6	12.3	12.5
o/w core tier 1 capital ratio (%)	11.3	10.3	11.6	11.0	8.4	10.9	11.5	12.5
Tangible equity / total assets (%)	13.7	11.7	12.2	9.6	5.9	7.1	7.9	8.0
Credit Quality								
Gross NPLs / Total Loans (%)	54.52	51.48	48.80	45.32	12.63	7.99	5.85	4.34
Risk Provisions / NPLs (%)	47	49	45	44	41	49	53	54
Bad debt chg / Avg loans (%)	3.35	1.00	1.42	2.23	11.13	1.58	0.95	0.69
Growth Rates & Key Ratios								
Growth in revenues (%)	-15	-10	16	-13	34	-2	-22	1
Growth in costs (%)	-34	2	-16	20	-27	-10	-6	-1
Growth in bad debts (%)	84	-74	34	56	288	-85	-36	-25
Growth in RWA (%)	-8	-3	-4	-6	-25	-4	6	2
Growth in loans (%)	-10	-11	-1	1	-8	5	7	5
Growth in deposits (%)	1	5	6	5	12	7	4	4
Net int. margin (%)	2.20	2.18	2.33	2.24	1.71	1.44	1.74	1.79
Cost income ratio (%)	52.9	61.7	46.6	57.3	35.5	35.1	43.6	42.7
Total loans / Total deposits (%)	105	89	83	80	66	65	67	68









Source: Company data, Deutsche Bank estimates

Appendix 1

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Disclosure checklist

Company	Ticker	Recent price*	Disclosure
Alpha Bank	ACBr.AT	1.02 (EUR) 28 Nov 2022	2, 7, 14
Eurobank	EURBr.AT	1.07 (EUR) 28 Nov 2022	1, 2, 7, 14
National Bank of Greece	NBGr.AT	3.75 (EUR) 28 Nov 2022	2, 7, 14
Piraeus Bank	BOPr.AT	1.43 (EUR) 28 Nov 2022	2, 14

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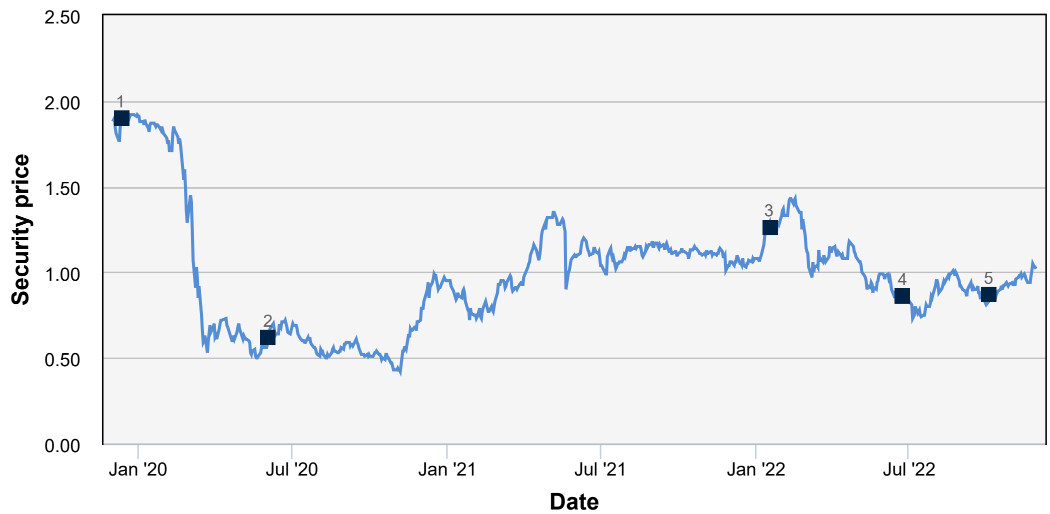
Historical recommendations and target price: Alpha Bank (ACBr.AT)

(as of 11/28/2022)



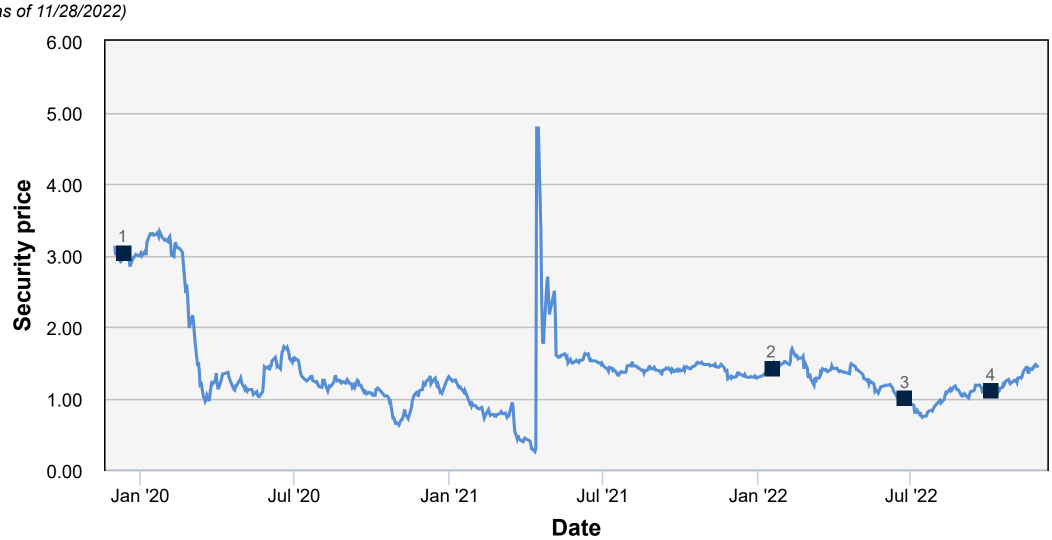
Current Recommendations
Buy
Hold
Sell
Not Rated
Suspended Rating

** Analyst is no longer at Deutsche Bank

1.	12/13/2019	Buy, Target Price Change EUR 2.30 Paola Sabbione**
2.	06/04/2020	Buy, Target Price Change EUR 1.20 Kazim Andac
3.	01/18/2022	Buy, Target Price Change EUR 1.55 Kazim Andac
4.	06/24/2022	Buy, Target Price Change EUR 1.45 Alfredo Alonso
5.	10/04/2022	Buy, Target Price Change EUR 1.55 Alfredo Alonso

Historical recommendations and target price: Piraeus Bank (BOPr.AT)

(as of 11/28/2022)



Current Recommendations
Buy
Hold
Sell
Not Rated
Suspended Rating

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2.	01/18/2022	Hold, Target Price Change EUR 1.55 Kazim Andac
3.	06/24/2022	Hold, Target Price Change EUR 1.35 Alfredo Alonso
4.	10/04/2022	Hold, Target Price Change EUR 1.60 Alfredo Alonso

Historical recommendations and target price: Eurobank (EURBr.AT)

(as of 11/28/2022)

Current Recommendations

Buy
Hold
Sell
Not Rated
Suspended Rating

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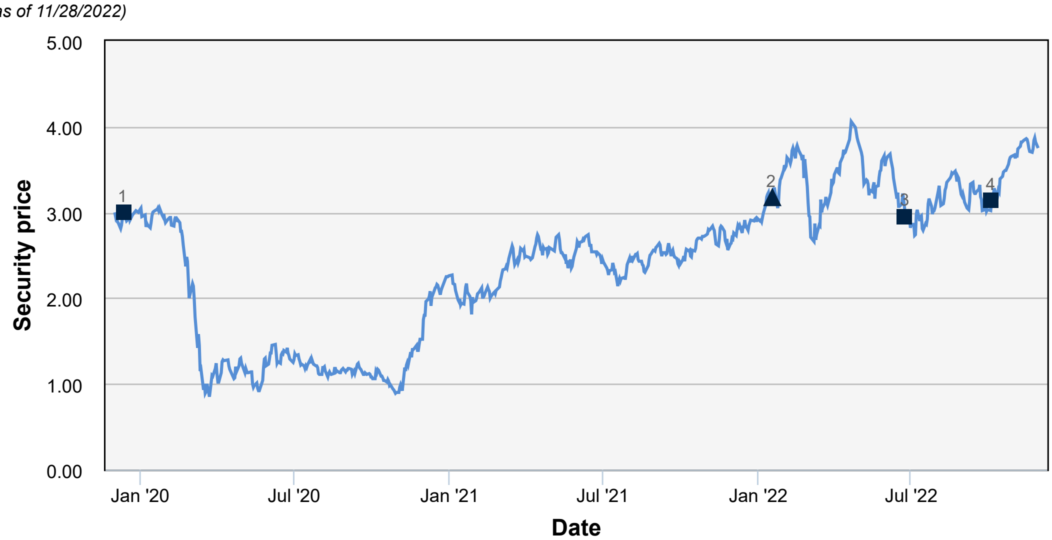
1.	12/13/2019	Hold, Target Price Change EUR 0.88 Paola Sabbione**
2.	06/04/2020	Hold, Target Price Change EUR 0.68 Kazim Andac
3.	03/08/2021	Hold, Target Price Change EUR 0.70 Kazim Andac
4.	06/08/2021	Hold, Target Price Change EUR 0.80
5.	01/18/2022	Hold, Target Price Change EUR 1.15 Kazim Andac
6.	06/24/2022	Hold, Target Price Change EUR 1.20 Alfredo Alonso
7.	10/04/2022	Hold, Target Price Change EUR 1.45 Alfredo Alonso

Historical recommendations and target price: National Bank of Greece (NBGr.AT)

(as of 11/28/2022)



Current Recommendations

Buy
Hold
Sell
Not Rated
Suspended Rating

** Analyst is no longer at Deutsche Bank

1.	12/13/2019	Hold, Target Price Change EUR 2.55 Paola Sabbione**
2.	01/18/2022	Upgraded to Buy, Target Price Change EUR 4.50 Kazim Andac
3.	06/24/2022	Buy, Target Price Change EUR 4.40 Alfredo Alonso
4.	10/04/2022	Buy, Target Price Change EUR 5.10 Alfredo Alonso

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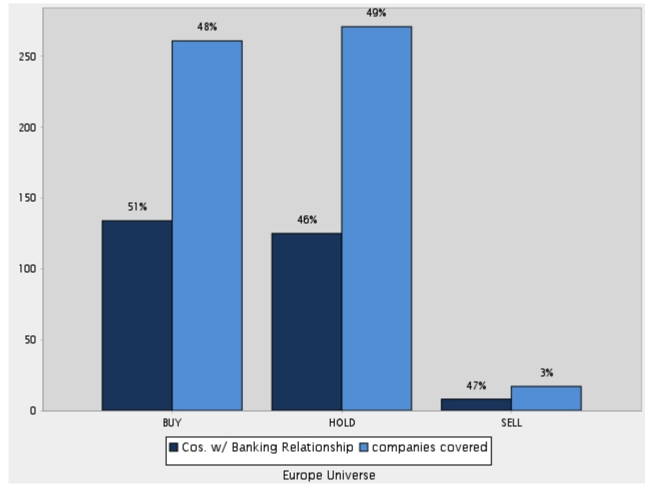
Equity rating dispersion and banking relationships



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