

Capital buffers and total CET1 requirements including Pillar 2

1. Introduction

The Basel III reforms introduced several capital buffers on top of the minimum 4.5% CET1 ratio to total risk-weighted assets (RWA). Some of the buffers are jurisdictional and bank-specific, such as the countercyclical capital buffer (CCyB), which depends on the bank's geographic footprint and jurisdictional policies and reciprocity. In addition, supervisors could require further CET1 capital under Pillar 2⁵⁸ of the Basel III framework, that could also vary across banks. Prior Basel III monitoring reports have included only the capital conservation buffer (CCoB) and G-SIB buffers in the analyses. This special feature is the first to include any additional CET1 capital requirements under Pillar 2, any other Pillar 1 requirements such as higher loss absorbency requirements for domestic systemically important banks, and any countercyclical capital buffer requirements.

The supervisory reporting system (SRS) data set was only recently augmented with information on total CET1 requirements including Pillar 2.⁵⁹ The information, however, was also backfilled as applicable for each jurisdiction. Thus, it is now possible to calculate for each bank CET1 capital surplus resulting from the risk-weighted capital stack as the difference between the amount of total CET1 capital held and the total required amount of CET1. Note that risk-based capital requirements were specifically defined based on CET1 capital only in the post-crisis reforms. Furthermore, the buffer framework was introduced in subsequent years with a fully phased-in target of 2019.⁶⁰ Jurisdictional implementation of all these components varied as well.⁶¹ Since the additional data on buffers are sparse prior to 2017, with most coverage starting in 2019, and for broadest consistency of the total CET1 requirements measure, we focus on the more recent data in this section.

Note that the other risk-based capital requirements analyses in this and prior reports are based on Tier 1 capital requirements, rather than CET1. This is a first view of risk-based capital in CET1 terms, its components and how they compare across segments of global banks and regions. The data availability is sufficient to provide a systemwide view, although the set of banks is slightly smaller than in the broader report due to data quality.

⁵⁸ For more details, see www.bis.org/bcbs/publ/d465.htm.

⁵⁹ The data were added in the end-June 2021 exercise, but significantly improved only with the end-December 2021 data collection. These data are used for the Committee's Basel III reforms evaluation work.

⁶⁰ See Box A earlier in the report.

⁶¹ For more detail on the rate of jurisdictional implementation see the BCBS Implementation reports and dashboard www.bis.org/bcbs/implementation/rcap_reports.htm.

2. Total CET1 requirements in relation to actual CET1 capital

In this section we analyse the evolution of the CET1 capital stack to fulfil the various requirements and buffers in the period around the Covid-19 pandemic for the global banking system. The period between 2019 and 2021 includes better data coverage as well as temporary changes in CET1 requirements due to Covid-19 related measures.⁶² The decrease in some buffers in early 2020, including CCyB but also CCoB and Pillar 2, led to significant capital requirement releases. A balanced data set is defined to show the evolution through time.⁶³ Furthermore, the figures are based on fully phased-in buffers and total CET1 requirements.

The left panel of Graph 1 below shows the shares of CET1 capital held used to fulfil the various requirements and buffers over time. The brown part of the bar shows the percentage of surplus CET1 on top of all the CET1 requirements.⁶⁴ The red line corresponds to the evolution of total CET1 requirement, including Pillar 2, as a percentage of RWA. The graph shows that all the buffers combined have a share of around 35–39%, slightly larger than the one of the minimum 4.5% requirement, which accounts for around one third (33–35%) of total CET1. The CCoB is the buffer requiring the most capital systemwide, followed by the G-SIB buffers, other Pillar 1 buffers⁶⁵ and Pillar 2. The CCyB is negligible at the beginning of the period even before any releases. While the CET1 requirements were reduced in H1 2020 across jurisdictions to help banks maintain lending and support the economy during the pandemic, the graph shows that relative capital surplus has also increased in the period after the onset of the pandemic. The right panel presents how total CET1 has been increasing for the system over time. Thus, the surplus increase is not just in relative but also absolute terms. The aggregate CET1 ratio (blue line) only drops briefly in H1 2020 and overall keeps an upward trend, unlike the CET1 requirement (red line) which remains lower for the periods after the initial release in H1 2020.

⁶² See www.bis.org/press/p200320.htm.

⁶³ The balanced data set consists of 94 banks of which 56 are Group 1 banks, 26 are G-SIBs and 38 are Group 2 banks.

⁶⁴ Note that a bank could use its CET1 surplus to fulfil Tier 1 or total capital requirements. Therefore, the effective CET1 surplus, when considering also other capital requirements that apply in parallel to the risk weighted capital requirements, might be smaller.

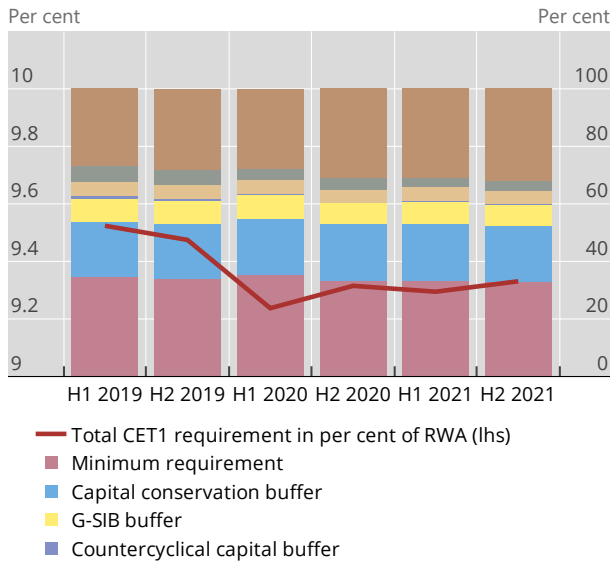
⁶⁵ Other Pillar 1 buffers include any additional CET1 requirement deriving from D-SIB buffers, other systemic buffers and any other additive capital requirements.

Evolution of CET1 stack

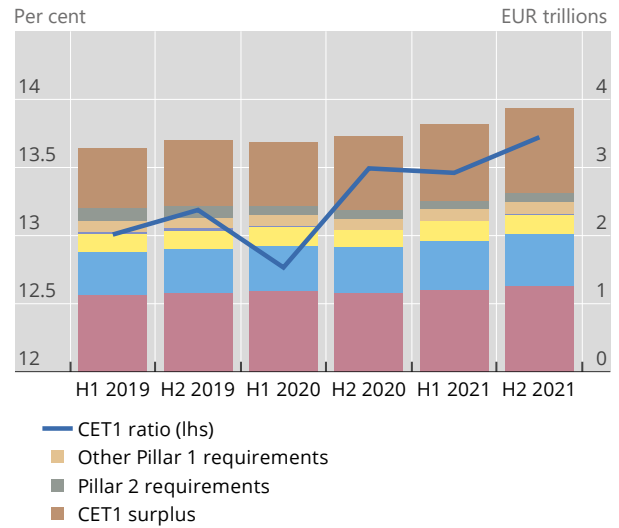
Balanced data set

Graph 1

In per cent of CET1 capital held



In EUR trillions



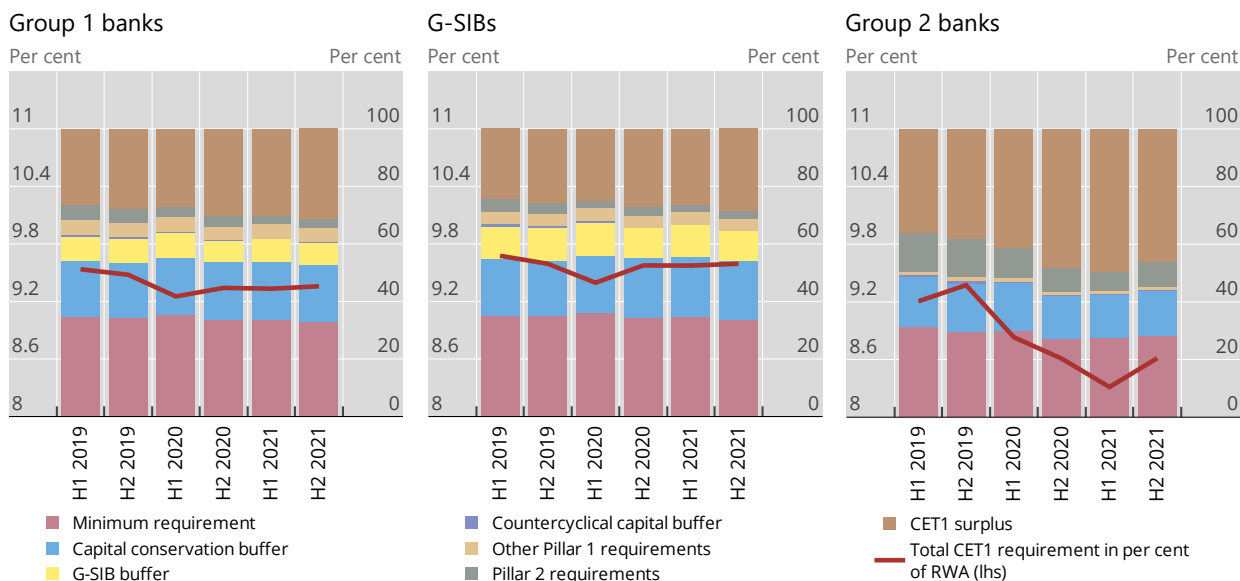
Source: Basel Committee on Banking Supervision. See the Excel data file for underlying data and sample size.

A normalised view of the CET1 composition is used to compare the buffer dynamics between bank groups in Graph 2. Group 1 banks and G-SIBs experience regulatory buffer releases at the same time in H1 2020 (see red line). While requirements for G-SIBs quickly reverted closer to pre-pandemic levels in 2021, requirements for the broader Group 1 are not yet close to pre-pandemic levels. As expected, the G-SIB buffer accounts for a larger share of CET1 for G-SIBs rather than for Group 1 banks, and it is not present for Group 2 banks. For this latter group of banks, Pillar 2 takes up a much larger share of CET1 capital. Consistently across all groups, the CET1 surplus increases post H1 2020, just as CET1 requirements decreased. There is no reversal to the trend of larger surplus even as requirements are beginning to climb up again.

Evolution of CET1 stack in percent of CET1 capital held and total CET1 requirement

By bank group, balanced data set

Graph 2



Source: Basel Committee on Banking Supervision. See the Excel data file for underlying data and sample size.

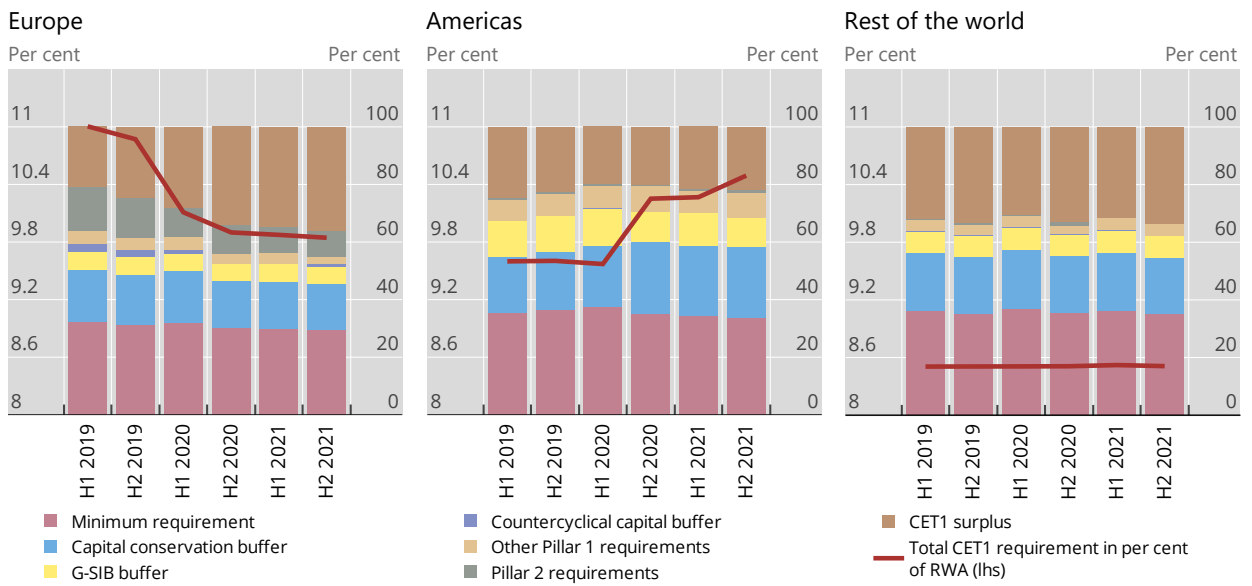
Looking across Group 1 banks by regions (Graph 3), the dynamics of buffers and surplus around the pandemic are similar, but the relative size of CET1 components differ. Europe and rest of the world show a larger portion of CET1 surplus than the Americas. Moreover, Pillar 2 is much larger for Europe. While the Americas have hardly any Pillar 2 CET1 requirements, the CCoB, G-SIB buffers and other Pillar 1 buffers are much more significant than in the other regions. This is consistent with the fact that in the US capital requirements resulting from the stress testing programme are reported as “other Pillar 1 requirements”, whereas many other countries use stress testing as an input to Pillar 2 requirements. For the rest of the world all buffers other than CCoB and G-SIB buffer have a negligible share, and the total share of buffers is smaller compared to the other two regions. The regional decomposition also shows differences in the overall CET1 requirements dynamics, which continued to decrease in Europe and increased sharply in the Americas⁶⁶, while remaining stable in the rest of the world. However, the CET1 surplus is consistently larger after H1 2020 for all regions. Surpluses appear to have the largest share of CET1 in the rest of the world. While CET1 requirements are lowest in this region, the actual CET1 capital ratios are at the level of the Americas, as shown in Graph 15 (left panel) of the main report.

⁶⁶ Since H2 2020, the increase in overall CET1 requirements and the higher share of the capital conservation buffer in the Americas are partially driven by the implementation of a more conservative national framework for buffer requirements in the United States.

Evolution of CET1 stack in percent of CET1 capital held and total CET1 requirement

Group 1 banks by region, balanced data set

Graph 3



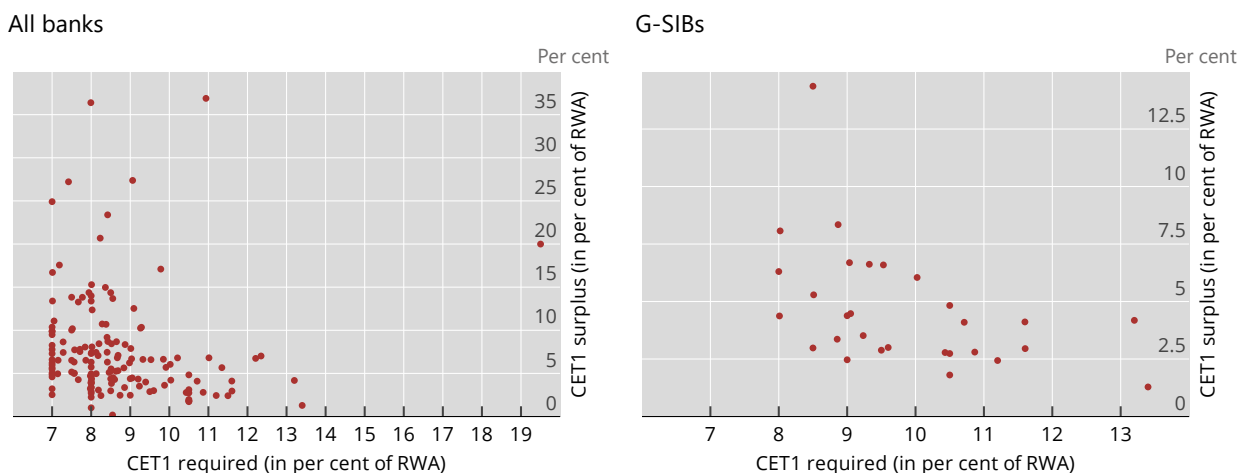
Source: Basel Committee on Banking Supervision. See the Excel data file for underlying data and sample size.

Looking beyond the aggregate system levels, Graph 4 shows the individual bank level scatterplot of CET1 requirements and CET1 surplus in percent of RWA, at the end of 2021. Based on the full set of banks reporting end-December 2021 data (left panel), it seems that those banks with higher required CET1 could have lower levels of surplus. The same negative correlation pattern is observed for the G-SIBs (right panel) and holds by region, by bank group, and at other points in time. More granular analysis through time is needed to characterise banks' surplus targets in relation to requirements post-pandemic.

CET1 required in per cent of RWA vs CET1 surplus in per cent of RWA

End-December 2021 data

Graph 4



Source: Basel Committee on Banking Supervision. See the Excel data file for underlying data and sample size.