LAPSE OF TIME

SM/20/102
Correction 1

July 16, 2020

To: Members of the Executive Board

From: The Secretary

Subject: **Norway—Financial System Stability Assessment**

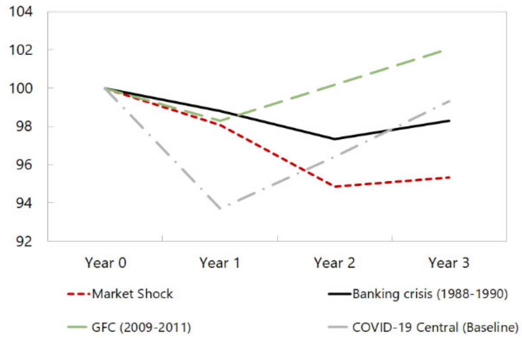
Board Action:	The attached corrections to SM/20/102 (7/8/20) have been provided by the staff:
Factual Errors Not Affecting the Presentation of Staff's Analysis or Views	**Pages 21, 25, 38, 39, 40, 41**
Questions:	Mr. Hofman, MCM (ext. 38415) Mr. Saiyid, MCM (ext. 35477)

Norges Bank estimates a somewhat larger average drop in the CET1 ratio—on the order of 6.2 percentage points (Figure 9, bottom right panel).

Figure 9. Norway: Solvency Stress Test Results—Market Shock Scenario [1/]

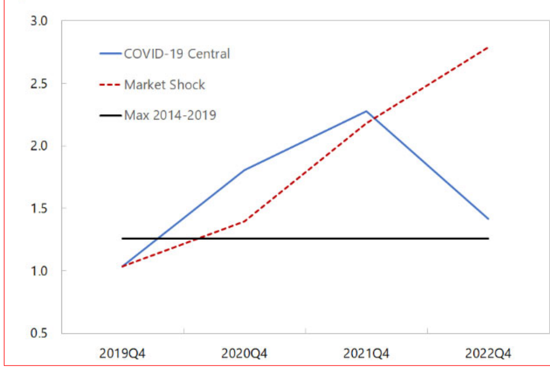
The GDP path under the Market Shock scenario is more severe than in past crises…

GDP Paths Under the Market Shock Scenario and Comparators



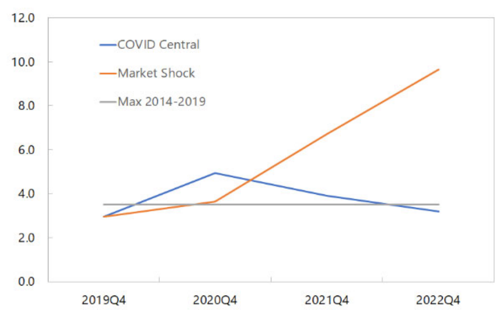
…. leading to a sharp increase in NPL ratios in the retail …

NPL Ratio in Retail Sector
(percent)



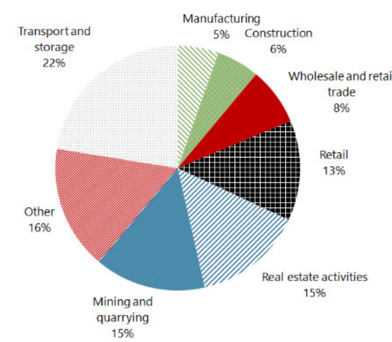
….and corporate portfolios, up to levels not seen since the mid-1990s.

NPL Ratio in Corporate Sector
(percent)



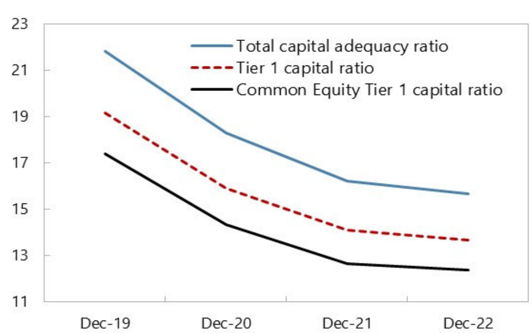
Loan losses would heavily impact some segments of the lending market …

Distribution of Losses Over the Risk Horizon Under the Adverse



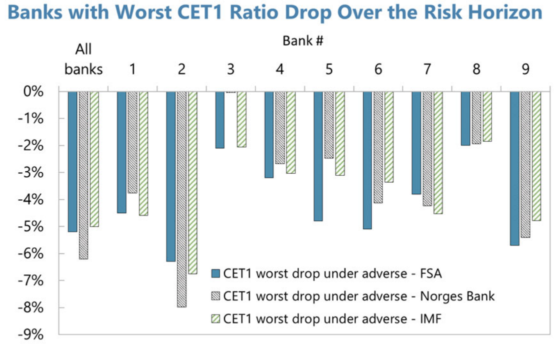
…and with losses also on debt securities and increases in Risk-Weighted Assets, capital ratios would decline sharply.

Capital Adequacy Ratios (percent)



The results are broadly similar across the three top-down exercises.

FSA, Norges Bank and IMF Top-down Solvency Stress Test: Banks with Worst CET1 Ratio Drop Over the Risk Horizon



Sources: Finanstilsynet, Norges Bank, IMF

1/ Results are for domestic banks only and exclude branches of foreign banks operating in Norway

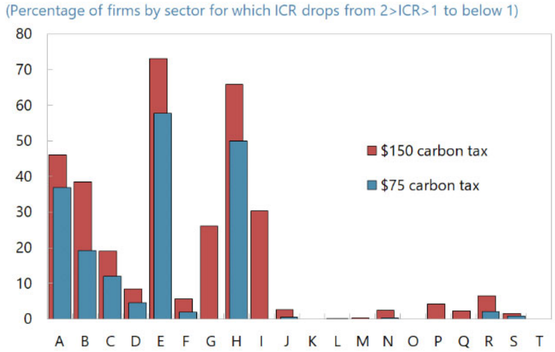
28. A permanent fall in global oil demand would lead to significant loan losses for Norwegian banks. Higher global carbon taxes would put a wedge between the global oil supply and demand curves and would structurally reduce external oil demand. This would result in a fall in oil revenues that could potentially impact financial stability. To examine this channel, the impact of lower Norwegian oil sector revenues on the Norwegian economy is estimated. The analysis suggests that loan losses of banks and mortgage corporations would be significantly impacted by shocks in oil revenues. The fall in revenues stemming from a carbon price of US$75 is estimated to increase loan loss rates by about 0.3 percentage points—a doubling from ~~current~~ pre-COVID levels—while a carbon price of US$150 would to lead to an increase by roughly 0.4 percentage points. These results are comparable to the increase in loan loss rates experienced during the oil price decline of 2014–16. This said, dynamics under a carbon price scenario can be expected to differ from past episodes since perceptions of the persistence of the shock will be different in case of a permanent policy change.

Figure 11. Climate Transition Risk Analysis

Agriculture, waste management and transportation sector can be materially impacted by carbon price increase.

Sector Impact Given Carbon Price Increase

(Percentage of firms by sector for which ICR drops from 2>ICR>1 to below 1)



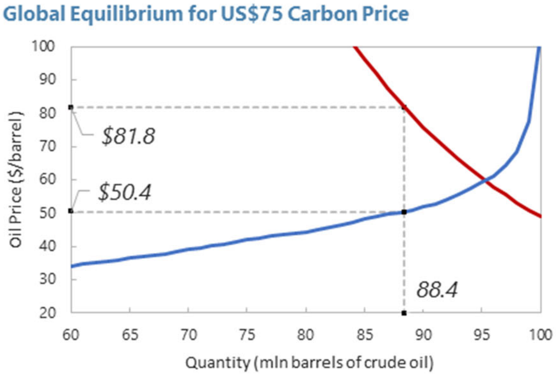
Source: IMF Staff Estimates

Note: A = Agriculture; B = Mining; C = Manufacturing; D = Electricity, gas; E = Water supply; sewerage, waste management; F = Construction; G = Wholesale; repair of motor vehicles; H = Transportation; I = Accommodation; J = Information; K = Financial and insurance activities; L = Real estate activities; M = Professional, scientific and technical activities; N = Administrative and support service; O = Public administration and defence; P = Education; Q = Human health and social work activities; R = Arts and entertainment; S = Other service activities; T = Activities of households.

Share of Banks' Corporate Debt at Risk from Higher Carbon Prices

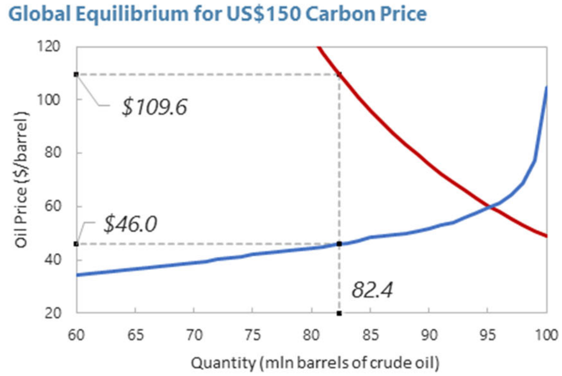
Uniform carbon price of	US$75		US$150	
(in percent)	Drop below ICR 2	Drop below ICR 1	Drop below ICR 2	Drop below ICR 1
All banks	2.25	2.22	4.04	3.95
Most exposed bank	9.03	9.08	15.87	15.78

Global Equilibrium for US$75 Carbon Price



Sources: Rystad Energy, IMF Staff Estimates

Global Equilibrium for US$150 Carbon Price



Sources: Rystad Energy, IMF Staff Estimates

Note: Supply curves are based on break-even prices for global oil production sites as provided by Rystad Energy. Demand curves are based on median price elasticity of oil demand from estimates in the literature.

Table 2. Authorities' Comments on Status of Key Recommendations of the 2015 FSAP	
Recommendation	**Progress**
Systemic Stability	
Improve liquidity monitoring by performing liquidity stress tests using the structure of cash flows at various maturities; or applying customized versions of the LCR along the maturity ladder. Consider options to discourage cross-ownership of covered bonds.	**Done.** The FSA and Norges Bank have finalized a framework for liquidity stress testing. The set up uses cash flow structures at different maturities and funding gaps are calculated under three different stress scenarios. Stress tests of the seven largest Norwegian banks were conducted in the fall of 2018 and the results were (anonymously) published in the FSA's Risk Outlook report in December 2018. Norges Bank also published results from the stress test in its Financial Stability report in October 2018. The framework has been used in a few on-site inspections. There are plans to further develop the framework with regards to feedback effects, systemic dimensions and possibly linking solvency and liquidity stress testing. With regards to cross-ownership of covered bonds, the FSA has started a project to look into the concentration of covered bonds in Norwegian banks' liquidity buffer (LCR).
Enhance the stress test framework for the insurance sector. Allocate more resources to the FSA to assess the liability side risks and validate models and assumptions used in the bottom-up stress tests by insurance companies.	**Ongoing.** The Solvency II legislation entered into force on January 1, 2016. Norwegian undertakings participated in the European Insurance and Occupational Pensions Authority (EIOPA) stress-test in 2016 and 2018. The FSA conducted thematic on-site inspections at the three largest life insurance undertakings during the autumn of 2016, and a further three inspections at medium sized undertakings during March to May 2017. The focus of the inspections was calculation and validation of the technical provisions and the solvency capital requirement. The inspections covered governance, documentation and validation on an overall basis, as well as more detailed issues on methods, assumptions and data used. Similar inspections have been conducted in the remaining undertakings in 2018 and in the first half of 2019. In 2018, the FSA conducted a survey that included all life insurance companies, where the purpose was to compare and challenge the calculated levels of the best estimate of technical provisions. A similar survey will be conducted in ~~2019~~ 2020.
Achieve recapitalization of weakly capitalized insurance companies in the current environment. Continue to restrict dividend payouts by such companies.	**Ongoing.** In a January 2017 letter to all life insurance undertakings the FSA stated that life insurance undertakings should not pay dividends as long as surplus on the insurance policies are used to strengthen reserves according to new requirements (new mortality tables). The letter stated further that where life insurance undertakings have been allowed to use the transitional rule for technical provisions, FSA assumes that the board of insurance undertakings make proper reviews of the need for capital accumulation in the undertaking both in the short and long term. ~~Today, c~~ Capitalization of life insurance companies ~~is more satisfactory overall~~ has improved. Nevertheless, the FSA continues to challenge certain companies' target levels for when dividends can be paid. ~~As of 2019, all Norwegian life insurance companies were satisfactorily capitalized.~~

Table 2. Authorities' Comments on Status of Key Recommendations of the 2015 FSAP (Cont.)	
Recommendation	**Progress**
Financial Sector Oversight	
Enhance the FSA's de jure operational independence, powers (particularly in regard to corrective actions and sanctions), and supervisory resources. Strengthen the FSA's supervision of small banks through conducting comprehensive assessments more frequently.	**Partly done.** The FSA has been given substantial sanctioning powers under the AML/CFT regulatory framework (see also below). Further, the FSAs budget has seen steady increases over the last years, in particular for 2019. This has among other things been allocated to supervision in relation to AML/CFT.
AML / CFT	
Upgrade substantially the FSA's supervisory approach towards the AML/CFT issues, including by increasing supervisory activities and providing guidance on the topic.	**Ongoing.** The FSA assesses the ML/TF risk in the institutions subject to supervision on a yearly basis. Risk assessments are updated annually and form the basis for the FSA's prioritization of its work against ML/TF. In the last year, the FSA has conducted AML/CFT on-site inspections in several institutions, including, banks, insurance undertakings and insurance intermediaries, investment firms, real estate agents, auditors and external accountants. The inspections are partly general inspections where AML/CFT is covered as one of several topics, and partly where AML/CFT is the main or sole topic. AML/CFT is also part of some off-site inspections. The number of inspections covering AML/CFT is rising, and more resources have been allocated to this work. As a result of increases in resources and supervisory activity, the FSA has ~~decided to~~ set up a dedicated Section for AML, which ~~is planned to be~~ has been operational from April 2019. A new AML Act was passed by the Norwegian Parliament in June 2018. It entered into force on the October 15, 2018, together with a new AML regulation. The AML Act implements the EU's Fourth Anti-Money Laundering Directive (2015/849) and the 2012 FATF Standards. The Act, among other things, gives the FSA powers to sanction non-compliance with administrative fines. The FSA has published general and sector-specific guidance papers on AML/CFT in 2016 and 2017. Guidance tailored to the new AML Act was published in May 2019.

Table 2. Authorities' Comments on Status of Key Recommendations of the 2015 FSAP (Cont.)

Recommendation	Progress
Macroprudential Framework and Policies	
Consider additional measures to contain systemic risks arising from the growth of house prices and household indebtedness (e.g., stricter LTV ratios, and loan-to-income or debt service ratio to supplement the affordability test).	**Mostly done.** In June 2015, the Ministry of Finance adopted a regulation on requirements for residential mortgage loans, which converted FSA guidelines into explicit requirements, effective from July 1, 2015 to end-2016. The requirements were retained in a new regulation from January 1, 2017, which also introduced a debt-to-income limit, tighter down-payment requirements, and a lower "speed limit" for Oslo (the percentage of new mortgages that can deviate from mortgage requirements). The Ministry of Finance extended ~~in June 2018~~ these regulations until end-2~~019~~020.
Consider measures to contain risks related to banks' wholesale funding.	**Partly done.** LCR regulation was introduced in Norway in 2015, and the phase-in period was completed by the end of 2017. The regulation imposes LCR requirements for all currencies in total (of 100 percent), In addition, LCR requirements for significant currencies have been introduced. Banks and mortgage companies with EUR or USD as significant currencies must have LCR in NOK of at least 50 percent. In addition, a NSFR requirement is expected to be introduced~~ after final EU rules are adopted.~~ Even though the NSFR requirement has not yet been introduced, the NSFR is implemented as a reporting requirement. All Norwegian banks had a NSFR ratio of at least 100 percent as of Q3 2018.
Improve the existing institutional structure for macroprudential policies. This should include more standardized and transparent procedures for giving advice to the MOF; a transparent "comply or explain" approach by decisionmakers; and, in due course, greater delegation of decision-making powers over macroprudential instruments to Norges Bank or the FSA.	~~**Under consideration**~~ **Partly done.** ~~The~~ A revised Central Bank Law was implemented in 2020. ~~Commission's proposal includes a proposal to establish~~ As a result, a new committee for monetary policy and financial stability has been established at Norges Bank. ~~The Commission proposes that the~~ The committee ~~be assigned responsibility~~ is responsible for the use of monetary policy instruments and efforts to promote financial stability and is chaired by the Governor of Norges Bank. The ~~proposal~~ revised law also includes somewhat more independence than today, by for example raising the threshold for when government instructions can be issued to Norges Bank. ~~The proposal has been publicly heard and is now under consideration in the Ministry of Finance.~~

Table 2. Authorities' Comments on Status of Key Recommendations of the 2015 FSAP (Concluded)	
Recommendation	**Progress**
Financial Safety Nets	
The MOF should initiate resolution planning for the largest banks, including assessing impediments to resolvability, and delegate specific responsibilities to the FSA and define expectations for the Norway-specific elements of the recovery and resolution plans of foreign bank subsidiaries and branches.	**Ongoing.** On 1 January 2019, the new legal framework corresponding to the EU's BRRD framework, including rules on resolution planning entered into force. The FSA is designated as the resolution authority in Norway and ~~has started~~is undertaking resolution planning for the largest banking groups in accordance with the BRRD framework.
Enhance the legal framework for resolution to comply with the FSB Key Attributes, in particular with regard to the resolution toolkit, operational independence, legal protection for the resolution authorities and administration boards, establishing earlier triggers for resolution, cross-border resolutions, and the distinction between going concern and gone concern resolution.	**Mostly Done.** As all essential elements of the BRRD have been implemented, the Norwegian legal framework mostly complies with the FSB Key Attributes. However, the issue of operational independence remains.
The BGF should adopt policies specifying under what conditions board members must recuse themselves, considering actual and prospective conflicts of interest.	**Done.** The BGF has adopted new policies specifying the following circumstances under which board members must recuse themselves: • When there is a possibility that a company the board member has an interest in would bid on a problem bank or part of its assets; • When there is a possibility that the whole bank in which the board member has an interest, or parts of its assets or its deposit portfolio, may be sold. The board members must consider whether to recuse themselves based on these criteria before a meeting where support from the BGF will be discussed. When the problem situation is over, the board shall review how the recusal was handled. These policies are available on the BGF's website (in Norwegian only). Effective from January 1, 2019, a new Board was appointed to the BGF. The new Board was appointed by the MoF rather than elected by member banks. The new Board has adopted the same principles as the previous Board regarding recusal and conflict of interest.
Financial Market Infrastructures	
Strengthen operational risk management related to outsourcing in systemically important payment systems.	**Done.** The risk management framework for the Norwegian Interbank Clearing System (NICS) has been improved, and now appears to be compliant with the CPMI/IOSCO principles. Organizational changes and plans for some increased resources for the NICS system ownership function have been implemented. A new operational set-up for the NICS system is under preparation. An enhanced contingency solution for the NBO (RTGS) system was implemented in November 2015.