Frankfurt am Main,
30 November 2018

BVI's[1] position paper on ESMA's consultation paper
Draft guidelines on stress test scenarios under the MMF Regulation

We take the opportunity to present our views on ESMA's proposals regarding amendments to the guidelines on stress tests scenarios under Article 28 of the MMF Regulation published in March 2018[2] in order to specify the information needed to fill in the corresponding fields in the reporting template mentioned in Article 37 of the MMFR.

General remarks

Our members manage in and outside Germany assets of EUR 16.6 billion in money market funds thereof EUR 2.1 billion is issued in Germany, giving it a market share of about 0.2 per cent of the European market. Even though money market funds have only little significance in Germany, ESMA addresses an important and general question in its consultation paper with relevance for all investment funds: how results of stress tests shall be reported and which harmonised level of detail is necessary in European guidelines?

We welcome an approach that reporting guidance for stress test results needs to be clear and consistent in any case (for example, whether the information should be reported as a percentage amount in relation to the NAV or in text form). This would lead to a better data quality to analyse the outcome by ESMA and/or the ESRB, where relevant. The reporting template mentioned in Article 37(4) of the MMFR and ESMA's stress test guidelines published in March 2018 already presents a table which is designed to ensure such data quality.

Moreover, compared to the requirements of the AIFMD, we are aware that Article 28 of the MMFR specifies reference parameters and factors for the stress test scenarios which are reflected in the reporting template. However, the reporting rules of both European acts are identical in so far as only the results of stress test should be reported without any specific requirements how to calibrate and measure the impact of the shocks. **Therefore, it is of utmost importance to maintain the already implemented principle-based approach in ESMA's guidelines for the question how to calibrate and measure the impact of the specific shock scenarios. In particular, the design of stresses should account appropriately for the business model and the size of the asset management company.** This applies all the more for the situation in Germany where management companies often simultaneous manage many different investment fund types and a money market fund is only one among many funds. Therefore, European guidance must be designed in such a way that the management company is able to adjust the stress test scenarios to the specifics of the managed funds such as size, strategy, pricing and risk models.

[1] BVI represents the interests of the German fund industry at national and international level. The association promotes sensible regulation of the fund business as well as fair competition vis-à-vis policy makers and regulators. Fund companies act as trustees in the sole interest of the investor and are subject to strict regulation. Funds match funding investors and the capital demands of companies and governments, thus fulfilling an important macro-economic function. BVI's over 100 members manage assets of more than 3 trillion euros for private investors, insurance companies, pension and retirement schemes, banks, churches and foundations. BVI's ID number in the EU Transparency Register is 96816064173-47. For more information, please visit www.bvi.de/en.
[2] https://www.esma.europa.eu/sites/default/files/library/esma34-49-115_mmf_guidelines_on_stress_tests.pdf.

BVI
Bundesverband Investment und Asset Management e.V.

Contact
Phone +49 69 15 40 90 0
www.bvi.de

BVI Berlin
Unter den Linden 42
10117 Berlin

BVI Brussels
Rue du Trône 14–16
1000 Bruxelles

BVI Frankfurt
Bockenheimer Anlage 15
60322 Frankfurt am Main

.BVI

However, we have the strong impression that ESMA leaves now the principle based approach to stress tests when proposing completely new implementation processes for stress test reporting. In particular, we strongly disagree to predetermine each factor by specific values and figures in ESMA's guidelines which should be used in a similar manner by all MMF managers in its reports. This applies all the more as ESMA proposes to calibrate factors by using commercial data such as discount factors for bid-ask spreads. This would lead to the situation that each MMF manager would be required to pay licenses to be allowed use such external data although the data may not be required by the internal stress test design of the MMF manager.

Moreover, if the consultation paper is as prescriptive as written, the already implemented principle based approach for conducting stress tests would no longer help with the regulatory reporting. MMF managers would not be able to use a general risk measurement tool they would need something very specific to produce the report.

In this context, we also strongly disagree with the requirement to implement processes which are established under other sector specific regulations which do not cover the different risks and business models of asset managers and the managed funds. **In particular, we expressly request ESMA to delete any proposal in using calibration models or measurements of shock scenarios established under banking or insurance company law such as CRD/CRR or Solvency II.** Banks and insurers are materially different from asset management as these sectors carry the risk of investment on their own balance sheet.

Moreover, in view of the time table for the first reporting period which is expected in the first quarter of 2020[3] and the earlier date of entry into force of the MMFR for new or already issued money market funds, it would be inappropriate to require much stricter or completely different processes in calibrating or measuring shocks only for reporting reasons. Such an approach would also lead to the unacceptable assessment that the established and implemented stress tests would be not in line with the requirements of the MMFR and ESMA's guidelines published in March 2018. This applies all the more as some examples given under the current ESMA's guidelines would be contrary to the new proposals suggested in the consultation paper.

Finally, we strongly disagree to report additional scenarios which are not required under the MMFR such as simulations of the default of the two main exposures or net redemptions of the two main investors of the money market fund. In particular, having a clear picture on the largest two investors can be a rather challenging task, in particular when considering potential sub-distribution networks. We are quite surprised that ESMA introduces again such an approach that was proposed for the five largest investors in its former consultation paper and ESMA itself has changed this approach in a principle based scenario. We also disagree with the proposal to establish different scenarios for institutional and retail clients. The stress test of redemption request must be focused on the units of the largest investors, irrespective of whether they qualify as retail or institutional.

[3] Cf. ESMA's press news: https://www.esma.europa.eu/press-news/esma-news/esma-consults-future-guidelines-money-market-funds%E2%80%99-disclosure.

General features of the stress test scenarios of MMF

***Q1** Do you agree that the impact of market stress should be primarily measured on the NAV?*

Yes, we agree. For the purpose of an alignment of the report of the stress test results, the NAV approach would be better to explain the impact on the MMF, for instance through a given formula by ESMA to show the relation to the NAV (such as the liquidity ratio or credit/FX risk in relation to the NAV). However, it should be clarified that the relevant portfolio (such as only the stressed assets) could be used for the measurement of the stress tests itself.

***Q2** Do you agree that some assets may not be stressed under all scenarios (in which case the scope of the assets that are subject to the individual stress tests will be clearly defined in the guidelines)? Or should we include additional assumption for those assets (e.g. default by depositary banks in repaying cash holdings)?*

In general and in line with current practice, all assets of the MMF are subject of stress tests on fund level. However, considering the reference parameters and factors mentioned in Article 28(1)(a)-(f) of the MMFR, not all assets need to be covered by all scenarios. **Therefore, it is important to highlight that the different shocks should be based on a case by case assessment without predetermined factors.**

For example, Article 28(1)(a) of the MMFR refers to hypothetical changes in the level of liquidity of the assets held in the portfolio of the MMF. However, the assessment whether the whole portfolio is liquid depends on the proportion of each asset in relation to the portfolio. Therefore, it is not appropriate to take into account all assets because, for example, if the proportion of one asset category is very small and does not affect the level of liquidity of the portfolio in general. Moreover, it is common practice to determine the market liquidity of the assets, taking account of the time span required for liquidation and the price or value at which those assets can be liquidated, as well as their sensitivity to other market risks or factors. This could lead to the assessment that an asset category such as short term cash holdings is always liquid. A liquidity shock would be not appropriate in this case. The same reasoning applies to other factors, in particular, the required credit shocks.

***Q3** Do you have views on the way to stress collateral in collateralised transactions (e.g. repos, derivatives)? It may especially involve increased counterparty risk or the need to post additional collateral.*

We disagree with an approach to stress collateral in collateralised transactions (e. g. repos, derivatives). Collateral is controlled by specific requirements such as EMIR or ESMA's guidelines on ETF and other UCITS issues. There are already strict requirements with regard to liquidity and counterparty risk in place. We do not see any additional need to incorporate collateral in stress tests and to report results of such tests.

***Q4** Do you agree that the same market stress parameters should be used for all MMFs in order to measure the impact on NAV? Do you have views on the way to take into account the type of fund (short term and standard; CNAV, VNAV and LVNAV) to measure the impact on the fund?*

It is of utmost importance to maintain the implemented principle-based approach in ESMA's guidelines with respect to the calibration and measurement of the impact of the shock scenarios mentioned in Article 28(1) MMFR. The different factors for the determination/calibration of shocks need to be based on a case by case assessment taking into account the individual investment strategy, size, pricing, risk models and investor composition of the MMF. There is no "one size fits all approach". Therefore, we disagree that the same market stress parameters based on predefined calibration factors and formulas should be used for all MMFs in order to measure the impact on the NAV. It is important that the MMF manager is able to adjust the stress test scenarios to the specifics of the managed funds. In our view, it is sufficient to report only one figure as an impact on the MMF (for example, the percentage amount of the shocked liquidity ratio in relation to the NAV). This could be explained in text form by a short summary of the (individual) calibration method used by the MMF manager. If there is a need for in-depth analysis by competent authorities or ESMA (because of possible impact on the financial stability) in the end, the outcome must be reflected and evaluated after the report.

***Q5** Do you agree that a consistent approach between the ESAs should be attained? Were appropriate, which risk parameters need to be significantly different?*

We fail to understand why there is a need for a consistent approach between the ESAs. The legal requirements, business models, relevant risks and the risk drivers are completely different between banks, insurance undertakings and asset managers. This has been recognised by FSB which changed the approach to asset management from a capital requirements based approach as applied to banks and insurers to a functional based approach. In particular, the objective of stress tests of investment funds is not to assess capital adequacy of the MMF. This applies all the more as long as ESMA proposes to use calibration methods which are established for special capital figures on company level (such as risk weights for the measurement of the liquidity cover ratio of banks) which do not exist under the requirements of investment funds.

Therefore, we strongly disagree to implement new processes which are established under other sector specific regulations which do not cover the different business models of asset managers. In particular, we expressly request ESMA to delete any proposal in using calibration models or measurements of shock scenarios established under banking or insurance company law such as CRD/CRR or Solvency II.

Hypothetical changes in the level of liquidity of the assets held in the portfolio of the MMF

***Q6** Do you have views on which factors are relevant for the determination/calibration of shocks?*

In our view, Section 4.2 of the ESMA guidelines published in March 2018 and the given examples in the annex of the guidelines already state in an appropriate manner how MMF managers could consider stress test parameters for hypothetical changes in the level of liquidity. We strongly disagree to specify the calibration figures of the hypothetical changes in the level of liquidity which should be used in a similar manner by each MMF manager for reporting reasons.

Moreover, in comparison to the methods already described in Section 4.2 of ESMA's guidelines, the proposed new calibration methods are completely different and new. We very much appreciate the efforts made by ESMA in further developments of calibration methods. **However, it must be clarified that the new proposals could only be further examples and not obligations for each MMF manager.** As long as ESMA is considering which factors could be also relevant for the determination/calibration of shocks, the guidelines under Section 4.2 could be amended by including the new proposals as examples and on a principle based approach. In this context, the following shock factors could also used in practice to stress the hypothetical changes in the level of liquidity of the assets held in the portfolio of the MMF:

- Master-data based estimation procedures such as asset category, ratings, remaining term
- Quantitative methods such as assumptions of normal or extremely distributions
- Different time horizons and varying degrees of stressed conditions could be considered by a downgrade of an issuer, reduced market volatility and declining stock prices, future negotiability of assets categories

However, in individual cases, it could be helpful to combine liquidity shocks with market risk shocks such as simulation of currency developments, changes of stock prices, interest rate developments, volatility and credit spreads, and market sensitivity.

Q7 *Do you have a preference between the two proposed options: calibrated discount factor on bid prices; Multiple quoted bid-ask spread?*

Please see our answer to question 6. **We strongly disagree to choose only one calibration method to measure the impact of the shocks on the MMF for reporting reasons.**

We are in favour to determine only the formula in ESMA's guidelines which must be used for the report to estimate the impact of the potential losses without any further explanations how to calibrate the stressed NAV because the different methods which could be used are already described in ESMA's guidelines under Section 4.2. In our view, the proposed formula under Option 1 serves such a purpose:

$$\text{Asset liquidity risk impact (\%)} = \frac{\text{Reporting NAV} - \text{Stressed NAV}}{\text{Reporting NAV}} * 100$$

Moreover, the proposed Option 2 (multiple quoted bid-ask spread) will not be suitable. In particular, bonds are mostly traded other the counter. The availability of market data remains relatively limited and the data quality of the bid-ask spreads is often insufficient. Therefore, MMF managers would be required to use more data and indicators in order to monitor or stress the market depth.

Q8 *What is your view on how to stress underlying assets not mentioned above (i.e. not corporate and government bonds)? In your opinion are there asset classes not mentioned above that should be excluded from a quantitative assessment?*

Please see our answers to questions 2 and 6. In particular, in considering the reference parameters and factors mentioned in Article 28(1)(a)-(f) of the MMFR, not all assets need to be covered by the all scenarios. We do not see the need for further guidance by ESMA.

Q9 *Do you have any views on the calibration? With reference to Option 2, do you think that the adoption of fixed stress factors for different asset classes is in line with practices? Which elements should be identified and used to define the appropriate stress factor for each asset class?*

We refer to our answers to the questions 6-8. We do not see the need for further guidance by ESMA.

Q10 Do you think that the volume of an asset held by the fund should be considered for the proposed stress factors (esp. the value of assets held compared with the size of the underlying market)? Do you have any views on the methodology?

We refer to our answers to questions 6-8. We do not see the need for further guidance by ESMA.

Hypothetical changes in the level of credit risk of the assets held in the portfolio of the MMF, including credit events and rating events

***Q11** Do you have views on which factors are relevant for the determination/calibration of shocks?*

In our view, Section 4.3 of the ESMA guidelines published in March 2018 and the given examples in the annex of the guidelines already state in an appropriate manner how MMF managers could consider stress test parameters for hypothetical changes in the level of credit risk. We strongly disagree to specify the calibration figures of the hypothetical changes in the level of liquidity which should be used in a similar manner by each MMF manager for reporting reasons.

Moreover, in comparison to the methods already described in Section 4.3 of ESMA's guidelines, the proposed new calibration methods are completely different. We very much appreciate the efforts made by ESMA in further developments of calibration methods. However, it must be clarified that the new proposals could only be further examples and not obligations for each MMF manager. As long as ESMA is considering which factors could be also relevant for the determination/calibration of shocks, the guidelines under Section 4.3 could be amended by including the new proposals as examples and on a principle based approach.

***Q12** Do you have a preference between the two proposed options: spreads multiplied by a factor or ESMA credit spread parameter?*

Please see our answer to question 11. **We strongly disagree to choose only one calibration method to measure the impact of the shocks on the MMF for reporting reasons**.

However, we are in favour to determine only the formula in ESMA's guidelines which must be used for the report to estimate the impact of the potential losses without any further explanations how to calibrate the stressed NAV because the different methods which could be used are already described in ESMA's guidelines under Section 4.3. In our view, the following formula serves such a purpose:

$$\text{Asset credit risk impact (\%)} = \frac{\text{Reporting NAV} - \text{Stressed NAV}}{\text{Reporting NAV}} * 100$$

.BVI

Q13 *Do you see specific issues (e.g. implementation, non-standardisation, or similar) with either of the two options?*

Please see our answer to question 11. **We strongly disagree to choose only one calibration method to measure the impact of the shocks on the MMF for reporting reasons.**

Q14 *Do you agree with having an additional credit stress simulating the default of the fund's two main exposures?*

No. We strongly disagree to report additional scenarios which are not required under the MMFR such as simulations of the default of the two main exposures. In our view, it is the task of ESMA to stress the impact on the European Market and the financial stability based on the main exposures of all MMFs reported by MMF managers.

Moreover, the proposed data would be meaningless. For example, an ETF-MMF which replicates the performance of German government bonds and which is still relatively low diversified would show heavy losses under such a scenario. This would lead to biased research.

Q15 *The additional stress simulates the default of the fund two main exposures: when an exposure is collateralised, do you think that additional assumptions on the value of the collateral are necessary (i.e. if the defaulting counterparty is fully collateralised, and the value of the collateral is unchanged, there will be no impact)?*

We refer to our answer to question 3. We disagree with an approach to stress collateral in collateralised transactions (e. g. repos, derivatives). Moreover, collaterals are already subject of the general risk management process (liquidity and credit risk). We do not see the need for further guidance by ESMA.

Q16 *Do you think that additional assumptions are needed to calculate the loss given default in the additional scenario?*

Please see our answer to question 14. We strongly disagree to report additional scenarios which are not required under the MMFR such as simulations of the default of the two main exposures.

Hypothetical movements of the interest rates and exchange rates. Hypothetical widening or narrowing of spreads among indices to which interest rates of portfolio securities are tied.

Q17 *Do you have views on which factors are relevant for the determination/calibration of shocks?*

In our view, Section 4.4 of the ESMA guidelines published in March 2018 and the given examples in the annex of the guidelines already state in an appropriate manner how MMF managers could consider reference parameters of the stress test scenarios in relation to hypothetical movements of the interest rates and exchange rats. We strongly disagree to specify the interest rate and FX shocks which should be used in a similar manner by each MMF manager for reporting reasons.

Moreover, in comparison to the methods already described in Section 4.4 of ESMA's guidelines, the proposed new calibration methods are completely different and new. We very much appreciate the efforts made by ESMA in further developments of calibration methods. However, it must be clarified that the new proposals could only be further examples and not obligations for each MMF manager. As long as ESMA is considering which factors could be also relevant for the determination/calibration of shocks, the guidelines under Section 4.4 could be amended by including the new proposals as examples and on a principle based approach.

Q18 *Do you consider that the parameters used for the 2018 EBA scenario cover all the parameters needed for the purpose of the MMF scenario on interest rates and exchange rates, and the scenario on hypothetical widening or narrowing of spreads among indices to which interest rates of portfolio securities are tied? If not, which parameters should be added?*

We strongly disagree to implement processes which are established under other sector specific regulations which do not cover the different risks and business models of asset managers and the managed funds. In particular, we expressly request ESMA to delete any proposal in using calibration models or measurements of shock scenarios established under banking or insurance company law such as CRD/CRR or Solvency II.

Hypothetical levels of redemption

Q19 *Do you have views on which factors are relevant for the determination/calibration of shocks?*

In our view, Section 4.5 of the ESMA guidelines published in March 2018 and the given examples in the annex of the guidelines already state in an appropriate manner how MMF managers could consider reference parameters of the stress test scenarios in relation to hypothetical levels of redemption. **In particular, we strongly disagree with the proposal to apply risk weights established under banking law in order to measure the liquidity cover ratio (LCR) of banks (please see our answer to question 23).**

Q20 *Do you agree with the proposed approaches: a self-assessment on the maximum size of outflows the fund can face without distorting portfolio allocation; a comparison of stressed outflows with available weekly liquid assets?*

No, we disagree with the proposed approaches. According to the requirements of the MMFR, only the results of stress tests shall be reported. The proposed weekly liquidity stress tests are not required by Level 1 of the MMFR. In particular, stress tests shall be conducted at a frequency after considering what an appropriate and reasonable interval in light of the market conditions is and after considering any envisaged changes in the portfolio of the MMF, at least bi-annually (cf. Article 28(3) MMFR). The new proposal of ESMA would effectively require the MMF manager to conduct stress tests on a weekly basis.

However, it could only be an option to report the outcome in the case in which the MMF manager has conducted stress tests on a weekly basis.

***Q21** Reverse stress test: do you have views on how to assess the capacity to comply with the weekly liquid assets requirements specified in Article 24(1)?*

We strongly disagree to require MMF managers to report results of reverse liquidity stress test which are not required by the MMFR. ESMA itself states in paragraph 18 of its guidelines that the inclusion of a reverse stress testing **may be** of benefit, but it is not required by the MFFR. This applies all the more for the report of the results of the stress test. It could only be an option to report the outcome only in the case in which the MMF manager has conducted a reverse stress test.

***Q22** Do you think there should be differentiated outflows assumptions for retail and institutional investors (e.g. higher outflows from institutional investors).*

We disagree with the proposal to establish different scenarios for institutional and retail clients. The stress test of redemption request must be focused on the units held by the largest investors, irrespective of whether they qualify as retail or institutional. In particular, German MMFs are typically invested in by all kind of investors. Therefore, it would be a huge administrative burden to analyse in detail the largest investor base by retail or institutional and to stress the largest investor on the basis of different parameters.

In this context, analysis of the German MMFs shows that investment management companies for the most part are able to manage liquidity risks in order to fulfil daily redemptions of fund units. In 2010, BVI assessed the issue of liquidity management for different kinds of securities funds, in particular MMFs. In a nutshell, evidence showed that a liquidity ratio of 30 % can be considered for a MMF as a robust prerequisite to fulfil redemption requests based on historical data.

Therefore, we would like to propose to use only standard amounts such as 30 per cent (or lower, e.g. 15 % per cent) as a general redemption scenario for reporting reasons. This would be in line with the current practice in Germany.

***Q23** Do you have views on the weights that should be attributed to weekly liquid assets?*

We strongly disagree with the proposal to apply risk weights established under banking law in order to measure the liquidity cover ratio (LCR) of banks. Paragraphs 62 and 63 of the proposed new guidelines should be deleted. The LCR refers to highly liquid assets held by banks to meet short-term obligations and is calculated by dividing a bank's high-quality liquid assets by its total net cash flows over a 30-day stress period. The idea is that by requiring banks to hold a certain level of highly liquid assets, they are less able to lend high levels of short-term debt. There are fundamental differences between the business models and market practices of banks and MMF. In particular, manager of MMF are not required to measure the LCR. Therefore, such an approach would constitute a breach of the Level 1 requirements of the MMFR including the requirements of the UCITS Directive and AIFMD which state a principle based approach to assess the relative liquidity of the fund’s assets in the market, taking account of the time required for liquidation and the price or value at which those assets can be liquidated, and their sensitivity to other market risk factors. Compared to banking law, there are no legal requirements to determine the assets as liquid via risk weights and credit quality steps.

Moreover, we do not see the need to specify the liquidity of the portfolio by other figures and methods which are already described under Section 4.5 of ESMA's guidelines. Further guidance by ESMA to determine the liquidity level of an MMF is not necessary.

Q24 *Do you agree with the additional stress test scenario simulating outflows from the two main investors?*

No. We strongly disagree to report additional scenarios which are not required under the MMFR such as net redemptions of the two main investors of the money market fund. Paragraph 64 of the proposed new guidelines should be deleted. In particular, having a clear picture on the exact holdings of the largest two investors can be a rather challenging task, in particular when considering layers of fund distribution networks. We are quite surprised that ESMA introduces again such an approach that was proposed for the five largest investors in its former consultation paper and ESMA itself has changed this approach in a principle based scenario. Under the current guidelines, it is only one example to stress the net redemptions of the three main investors (please see the annex of the guidelines).

It must be noted that the FSB only states in Recommendation 3 that authorities should have requirements or guidance stating that funds' assets and investment strategies should be consistent with the terms and conditions governing fund unit redemptions both at fund inception and on an ongoing basis (for new and existing funds), taking into account the expected liquidity of the assets and investor behaviour during normal and stressed market conditions. The FSB does not recommend to analyse the investor base in detail. If there is a need to give guidance on the assessment of investor behaviour, analyses of the outflows based on historical (statistical) data should be sufficient. This applies all the more as it is difficult or impossible to identify an emerging liquidity shortage before it occurs by anticipating the potential behaviour of the investors.

Hypothetical macro systemic shocks affecting the economy as a whole

Q25 *Do you agree that for the first update of the guidelines MMF managers could be asked to combine the impact of the different risk scenarios, including the liquidity shock?*

As recommended by the FSB policy recommendations to address structural vulnerabilities from asset management activities[4], it is the task of the authorities to analyse the level of systemic relevance and to consider whether and how to incorporate such potential impact in system-wide stress testing to better understand collective behaviour dynamics as well as the impact on financial markets and on the financial system more generally. Although such system-wide stress testing exercises are still in an exploratory stage, the FSB highlights that over time authorities may provide useful insights that could help inform both regulatory actions and funds' liquidity risk management practices.

Therefore, we agree with ESMA's general approach to keep the methodology simple for the macro systemic shocks affecting the economy as a whole at the current stage. Assuming that the MMFR re-

[4] Available under the following link: http://www.fsb.org/wp-content/uploads/FSB-Policy-Recommendations-on-Asset-Management-Structural-Vulnerabilities.pdf.

quires the MMF manager to identify the effect of macro-systemic shocks, it could be helpful that ESMA itself (in consultation with the ESRB) would be required in its guidelines to disclose the outcome of the analyses of the reported results of stress tests to the public with a view on the macro-systemic impact. These figures could be used in future by the MMF manager for identifying the effect of macro-systemic shocks affecting the economy as a whole. As long as such figures are not existent, it could also be a solution that there is no report needed at the current stage or the manager could made a general statement that the MMF as individual investment fund (because of the size and investment strategy) cannot affect the economy as a whole. We therefore propose that ESMA establish guidance under which circumstances such macro shocks indeed necessary or where exemptions shall apply.