







A quarterly review of the countercyclical capital buffer

A study prepared for a meeting of the Financial Stability Committee

Executive summary

This study is a compilation of information for the purposes of assessing the intensity of cyclical systemic risk and the level and adequacy of the countercyclical capital buffer (CCyB) rate recommended by the Financial Stability Committee (FSC).

Cyclical risk intensity has increased slightly, mainly due to the base effect. The level of the risk, as measured by the early warning model, remains within the range defined as normal – risk is neither markedly elevated nor markedly depressed. Therefore, there are no grounds for establishing a buffer over its neutral rate.

Lending is recovering, but its pace is moderate and poses no threat to financial stability. Despite the growth in some indicators used to measure the level of cyclical risk, no signs of excess credit growth have been observed.

There are no grounds for setting the CCyB over the target nCCyB rate of 2% adopted in the Strategy on the application of the countercyclical capital buffer in Poland,¹ with a transitional stage at the rate of 1%.

¹ In accordance with Resolution No 72/2024 of the Financial Stability Committee of 22 March 2024 on the adoption of a strategy on the application of the countercyclical capital buffer, the Committee states that, "[...] the desired neutral rate of the countercyclical buffer should amount to 2%." (See <u>Financial Stability Committee (2024)</u>, <u>Strategy on the application of the countercyclical capital buffer in Poland</u>).

This study is divided into three sections.

Section 1 provides a synthetic summary of current strains in the financial system in Poland. If any crisis events emerge, it will not be advisable to activate a countercyclical buffer, even if the early warning model would imply such a move. Elevated current stresses and crisis events could simultaneously justify a partial or full release of the buffer.

Section 2 presents the results of the early warning model. The role of models of this class is to capture a signal of a forthcoming financial crisis from the data analysed. The early warning model is employed to measure the intensity of cyclical risk and is applied to indicate the right timing of the activation of the countercyclical buffer and its adequate level.

Section 3 presents the progression of credit gap values and of other variables that illustrate lending in Poland. The early warning model, whose results are discussed in Section 2, includes these variables and additionally pools information coming from the variables with other data. Therefore, the variables have lost their dominant position in cyclical risk analysis in the context of the countercyclical buffer. However, these variables continue to play an auxiliary role in identifying the credit cycle.

In order to ensure that the conclusions presented here are as up-to-date as possible, the study uses the latest available data, as indicated in the notes under each figure and in the table below.

| Figure | Last observation date |
|--|--------------------------|
| Figure 1. Composite Indicator of Systemic Stress in the financial system | 15 August 2025 |
| Figure 2. Cyclical risk intensity (MMCL) | 31 March 2025 |
| Figure 3. Decomposition of changes in cyclical risk intensity (MMCL) | 31 March 2025 |
| Figure 4. Adequate level of the CCyB | 31 March 2025 |
| Figure 5. Breakdown of the ratio of credit to the private non-financial sector to GDP (%) | 31 March 2025 |
| Figure 6. Standardised credit gap (left panel) and credit gap compliant with the length of the financial cycle in Poland (right panel) | 31 March 2025 |
| Figure 7. Growth in selected categories of credit to the non-financial sector, y/y | 30 June 2025 |
| Figure 8. Value of new loans (3-month moving average) | 30 June 2025 |

Historical data are subject to updates which may affect the conclusions contained in previous issues of *A quarterly review of the countercyclical capital buffer*. Should such a situation arise, relevant information is included in the notes under a figure or a table.

1. Current financial system stress

Current stress in the financial system is not a contraindication to activating a buffer. The Composite Indicator of Systemic Stress (CISS)² measures current stress in the financial system. High CISS levels indicate that there is stress which may morph into a financial crisis in the near future. Therefore, it would not be advisable to raise capital requirements as it could lead to a further build-up of stress. Since February 2023, the CISS has remained below the average level from the period identified by the European Systemic Risk Board (ESRB) as a period of elevated risk (see Figure 1), therefore there are no grounds that can be a counterindication to activating a buffer.

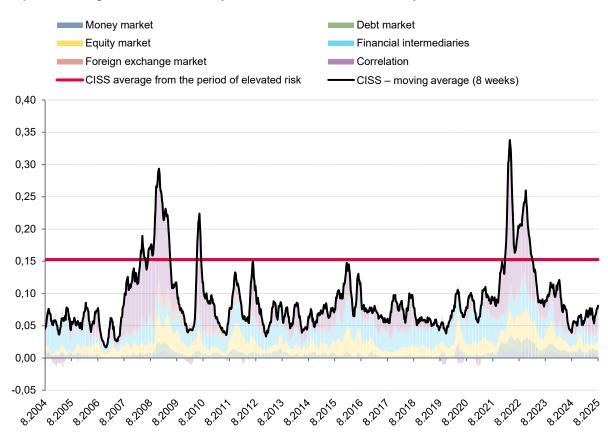


Figure 1. Composite Indicator of Systemic Stress in the financial system

Notes: The CISS measures the current state of financial sector turmoil, reflected in market quotations. The intensity of the turmoil in a given period is interpreted as an ex-post measure of systemic risk. The CISS was originally developed for the euro area and has been applied by both the ECB and the ESRB. The sub-indices that comprise the CISS include five areas of the domestic financial market: the equity market, the money market, the foreign exchange market, the debt market and the financial intermediaries market. *Correlation*, or the sixth variable, increases when stress begins to prevail in several sectors at the same time. Periodically, this variable may be negative; this refers to a situation in which stress in some areas is offset by a positive stress-free situation in other areas. Such a design of the CISS puts more weight on situations in which stress prevails in several market segments at the same time.

The red line is used to mark the average CISS value from the period classified by the ESRB as a period of elevated risk (August 2007 – November 2009). Data for the period running from 15 August 2004 to 15 August 2025. Source: NBP, Bloomberg, Reuters.

² The ESRB recommends monitoring the CISS (ESRB 2014/1, Recommendation D, paragraph 2).

2. Cyclical risk intensity³

The adequate level of the countercyclical capital buffer (CCyB) is determined in accordance with Equation 1:

$$BA = max[MMPK - MKR, nBA],$$

where: MMCL stands for Minimum Macroprudential Capital Level; MRC stands for Macroprudential Regulatory Capital.

MRC is equal to the Pillar 1 capital requirement of Tier 1 capital and the conservation buffer ($MRC = pillar_1 + CCoB$); nCCyB means the positive neutral rate for the countercyclical buffer level.

The MMCL defines the minimum level of the capital ratio in the banking system which – taking into consideration other variables – reduces the model-estimated risk of a financial crisis to a satisfactorily low level. The higher the level of the capital ratio, the lower the risk of a crisis. Therefore, changes in the MMCL reflect changes in cyclical risk intensity. An increase in the MMCL means that the model variables imply an increase in cyclical risk intensity, while a decline in the MMCL indicates a decrease in risk intensity.

Cyclical risk intensity has increased slightly. However, the increase results from a base effect related to the VIX index (see details below) and should be disregarded when making a decision about the current level of the countercyclical capital buffer. Despite the rise, the recorded MMCL remains within the range defined as a standard risk level⁴ (see Figure 2). The measurement of cyclical risk intensity indicates that the current situation should be interpreted as normal – risk is neither markedly elevated not markedly depressed.

Risk pricing on the global financial market was the key factor driving the increase in cyclical risk in the global financial market in the past quarter (see *Global variables* in Figure 3). The early warning model interprets both a low level of risk pricing in the global market (VIX), and a negative long-term change in risk pricing as contributors to the increase in systemic risk in Poland.⁵

³ The results in this section of the study were elaborated based on an updated methodology for calibrating the countercyclical capital buffer: Financial Stability Committee (2024), *Methodology for setting the countercyclical capital buffer*.

⁴ A standard risk level is defined as a range such that only periods of more than average turmoil in the domestic financial market or its immediate environment fall outside it. The following are outside the range of a standard risk level: (i) a rise in cyclical risk intensity readings in view of a forthcoming global financial crisis, (ii) a fall in cyclical risk intensity readings in view of the consequences of a global financial crisis, (iii) a fall in cyclical risk intensity readings in view of the euro area sovereign debt crisis, (iv) a fall in cyclical risk intensity readings in view of the COVID-19 pandemic, (v) a fall in cyclical risk intensity readings following the outbreak of war in Ukraine. As a result, within the standard range of risk, the central measure of cyclical risk intensity ∈ (8.1%; 9.9%).

⁵ This is because when global risk pricing is low, the likelihood of global, universal underestimation of the risk price is relatively high.

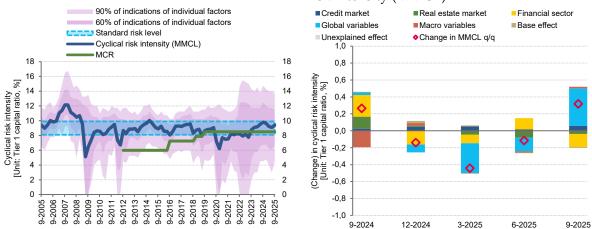
The VIX increased by 7% compared to the previous quarter. The higher level of the VIX lowers the assessment of cyclical risk intensity. Due to this change, the MMCL dropped by 0.09 p.p. compared to the previous quarter.

In order to capture the long-term growth of the VIX, the early warning model uses the five-year growth rate, which amounted to -41% last quarter. Negative long-term growth causes the assessment of cyclical risk intensity to be raised. Due to this change, the MMCL increased by 0.53 p.p. on the previous quarter.

In the last quarter, the net impact of the VIX on the MMCL was +0.44 p.p. (see *Global variables* in Figure 3). However, the dynamic drop in the VIX comes from the base effect. The denominator of the current five-year growth is the first quarter of 2020, i.e. a period when the VIX was at one of the highest levels in history due to the outbreak of the COVID-19 pandemic.

Figure 2. Cyclical risk intensity (MMCL)

Figure 3. Decomposition of changes in cyclical risk intensity (MMCL)



Notes (left panel, Figure 2): The model-based reading of cyclical risk intensity (MMCL) declines in crisis situations because when a negative shock occurs, cyclical risk is discharged; hence, a forward-looking model indicates that the required macroprudential level of capital is lower. The purple ribbons marked 60% and 90% denote the ranges in which 60% and 90% of indications from the individual variables taken into account when determining the MMCL fall, respectively. The broader the ribbons, the greater the uncertainty related to the reading of the MMCL.

Notes (right panel, Figure 3): The figure shows the impact of individual variables on changes in the MMCL shown in Figure 2. The last, current reading made in 2025 Q3 is based on data for the end of 2025 Q1. The updating of historical data does not affect the interpretation of results.

⁶ The list of indicators which make up each of the categories shown in the figure: (i) credit market – broad credit aggregate for the

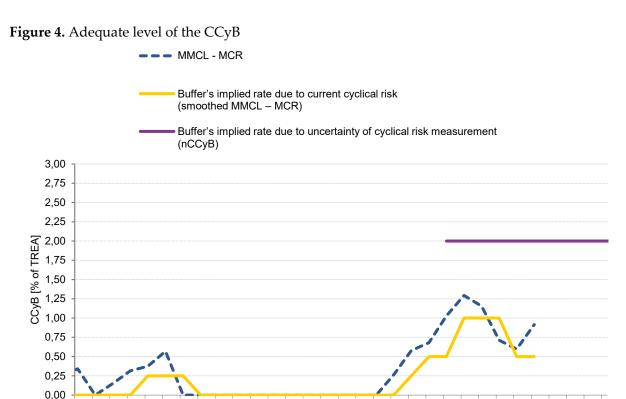
Source: NBP.

global variables – VIX – Chicago Board Options Exchange Volatility Index; (vi) macro variables – balance of current account to GDP, GDP, broad money aggregate, M3 money aggregate, government debt to GDP, value added of the public sector to the sum of value added in a given year.

private non-financial sector, broad credit aggregate to GDP, narrow credit aggregate for the private non-financial sector, narrow credit aggregate to GDP, DSR for the private non-financial sector, broad credit aggregate for households, broad credit aggregate for non-financial corporations; (ii) real estate market – real estate prices to rental cost, real estate price index, real estate prices to income, value added of the real estate market to the sum of value added in a given year; (iii) base effect – value of the Tier 1 capital ratio to TREA in the last year; (iv) financial sector – value added of the financial market to the sum of value added; (v)

The most important factor that contributed to downward pressure on cyclical risk in the last quarter was the share of the financial sector in value added (see *Financial sector* in Figure 3). A rise of the indicator, most specifically a sudden rise, could indicate that financial agents take excessive risk. In the past quarter, the share of the financial sector in value added shrank by 0.1 p.p. quarter on quarter. This caused the MMCL to decrease by 0.16 p.p.

Two rates implied from the model are taken into consideration to determine an adequate rate of the countercyclical capital buffer (CCyB, see Equation 1). One is the buffer's implied rate due to current cyclical risk, defined as a smoothed MMCL - MCR. This value now amounts to 1% (see yellow line in Figure 4). The other one is the buffer's implied rate due to uncertainty of the measurement of cyclical risk, or the nCCyB target level of 2% (see purple line in Figure 4).



Notes: Data presented since 2019, when the capital conservation buffer became effective at the current level of 2.5%, which results in a constant-over-time level of the MCR. The last, i.e. the current reading made in 2025 Q3, is based on data for 2025 Q1. The updating of historical data does not affect the interpretation of results. *Source*: NBP

6.2022 9.2022 12.2022 3.2023 6.2023 9.2023 3.2024

6.2024 9.2024 2.2024

3.2022

2.2020

3.2021

6.2021 9.2021 2.2021

⁷ Smoothing consists in applying the rule according to which a change in the buffer's implied rate should be maintained for two consecutive quarters. The application of the rule helps to formulate a directional expectation for the model's indications concerning an adequate rate of the CCyB in the next quarter. The MMCL level increased in the current reading compared to the previous quarter. Therefore, it is possible that the buffer's implied rate due to current cyclical risk (see yellow line in Błąd! Nie można odnaleźć źródła odwołania.) will rise to 0.75% or remain unchanged, i.e. at 0.5%. Due to methodological reasons, an increase is possible only in the case of a revision of historical statistical data.

An adequate level of the buffer is the higher of the two implied rates (i.e. 2%). In accordance with Resolution No 74/2024 of 14 June 2024, the FSC recommended achieving the target rate of the nCCyB in two stages: at the first stage, by setting the buffer at the rate of 1%, and raising it to 2% after one year. This recommendation was reflected in the *Ordinance of the Minister of Finance of 18 September 2024 on the countercyclical buffer*. The ordinance sets the applicable countercyclical capital buffer at the rate of 1%. The new rate applies from 24 September 2025.

There is currently no rationale for setting the CCyB over the target nCCyB rate of 2% adopted in the *Strategy on the application of the countercyclical capital buffer in Poland*,8 with a transitional stage at the rate of 1%.

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⁸ In accordance with Resolution No 72/2024 of the Financial Stability Committee of 22 March 2024 on the adoption of a strategy on the application of the countercyclical capital buffer, the Committee states that, "[...] the desired neutral rate of the countercyclical buffer should amount to 2%." (See Financial Stability Committee (2024), Strategy on the application of the countercyclical capital buffer in Poland).

3. Position in the credit cycle and the ESRB-recommended indicators

The early warning model is based on information from many variables; therefore, it helps to make a complex assessment of cyclical risk intensity. However, an analysis of individual indicators provides a better illustration of the nature of changes in cyclical risk intensity. A review of selected indicators, the monitoring of which is recommended by the European Systemic Risk Board (ESRB/2014/1), is presented below.

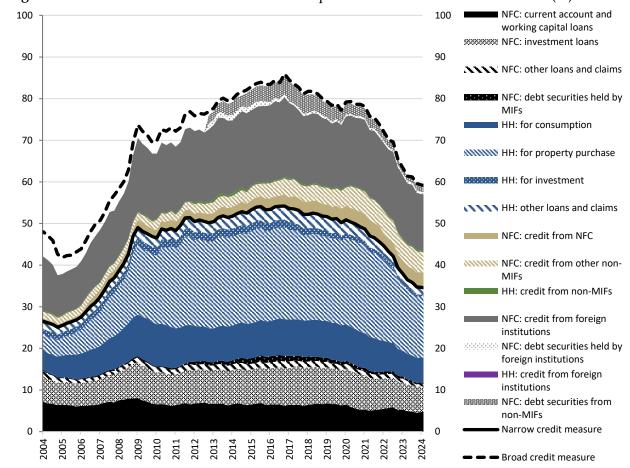


Figure 5. Breakdown of the ratio of credit to the private non-financial sector to GDP (%)

Abbreviations: NFC stands for non-financial corporations, HH stands for households and MFI stands for monetary financial institutions.

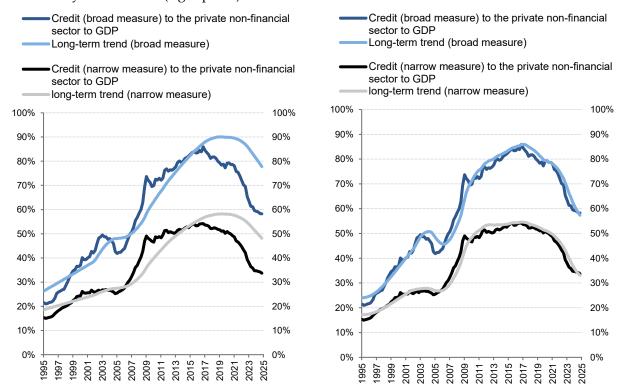
Notes: Last observation for 2025 Q1. The ratio of credit to the private non-financial sector to GDP includes debt of non-financial corporations and households due to loans and borrowings and debt securities. The ratio calculated on the basis of the narrow credit measure includes debt towards banks and cooperative savings and credit unions, and additionally – on the basis of the broad credit measure – debt towards other domestic non-monetary entities and foreign entities. The area chart runs in some parts below the black dashed line of the credit (broad measure) to GDP ratio, because in these periods – due to missing data – debt due to debt securities was not divided into debt towards banks and cooperative savings and credit unions and debt towards other domestic non-monetary entities. In these periods, the empty area presents, collectively, the debt of NFC due to debt securities. The data that enable a detailed breakdown have been available since 2012 Q4.

The updating of historical data does not affect the interpretation of results.

Source: NBP

In 2025 Q1, the ratio of credit to the private non-financial sector to GDP (broad credit aggregate) amounted to 57.1%. This represents a 2.1 p.p. decrease year-on-year and a 1.1 p.p. decrease quarter-on-quarter. The level of private non-financial sector debt towards domestic monetary financial institutions (i.e. banks and cooperative savings and credit unions, or narrow credit aggregate) amounted to 33.4% PKB, which represents a decline of 1.3 p.p. year-on-year and of 0.4 p.p. quarter-on-quarter. In nominal terms, the broad credit aggregate increased by 3.2% in 2025 Q1 compared to the corresponding quarter of 2024. In the corresponding period the narrow credit aggregate grew by 2.9%. According to forecasts, 10 the credit-to-GDP ratio will remain in the downward trend observed since 2017 (see Figure 5). This points to the low intensity of cyclical risk related to excess credit growth.

Figure 6. Standardised credit gap (left panel) and credit gap compliant with the length of the financial cycle in Poland (right panel)



Notes: Last observation for 2025 Q1. Credit gap estimations were obtained using the one-sided recurrent Hodrick-Prescott (HP) filter, which ensures that to calculate a trend only information available in every moment in time is used. This approach is compliant with Recommendation (ESRB/2014/1).

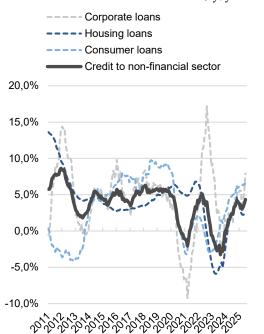
The updating of historical data does not affect the interpretation of results. *Source*: NBP and Statistics Poland.

⁹ The ratio of credit to the private non-financial sector to GDP includes debt of non-financial corporations and households due to loans and borrowings and debt securities. The ratio calculated based on the narrow credit measure includes debt towards banks and cooperative savings and credit unions, and additionally – on the basis of the broad credit measure – debt towards other domestic non-monetary entities (among others, enterprises, financial intermediaries) and foreign entities.

¹⁰ In line with the forecast presented in Narodowy Bank Polski (2023), Financial System in Poland 2023, the narrow credit-to-GDP measure will fall below 30% by the end of the forecast horizon, i.e. by the end of 2026.

The credit gap is a standard indicator used for cyclical risk analysis. In 2025 Q1, the standardised credit gap¹¹ was -19.57% (see Figure 6). The credit gap computed on the basis of the narrow credit measure amounted to -13.96%. This signals a low intensity of cyclical risk related to excess credit growth. The value of the credit gap, after taking into account the length of the financial cycle in Poland, was estimated at 0.86% for the broad credit measure and 1.05% for the narrow credit measure. The positive figures point to a slowdown in the decline of credit to GDP.

Figure 7. Growth in selected categories of credit to the non-financial sector, y/y



Notes: Last observation for June 2025. *Source* (both Figures): NBP

Figure 8. Value of new loans (3-month moving average)



Notes: Under new corporate loan statistics, current loans are not included.

At the end of 2025 Q2, growth in all the major credit categories was positive. Overall growth in credit to the private non-financial sector reached 4.3% y/y in June 2025 (see Figure 7). The production of new loans exceeded PLN 8 billion in June 2025. The value of new consumer loans is steadily growing: in 2025 Q2 the value of new loans increased by 8.0% compared to the previous quarter (see Figure 8). The growth in this category of loans might be attributed to customers' taking debt consolidation loans. The high value of new consumer loans did not mean an equally fast increase in the loan stock. This is, among other things, due to the faster repayment of such loans and the fact that debt consolidation loans were used for repaying other outstanding loans. Therefore, this situation does not point to excess credit growth.

¹¹ The standardised credit gap is a deviation in the value of credit to the private non-financial sector to GDP ratio from the long-run trend. In compliance with Recommendation (ESRB/2014/1), the long-run trend was specified using a recursive HP filter with the smoothing parameter λ =400,000, which corresponds to fluctuations lasting 20 years and more.

¹² In this approach, the long-run trend was determined using a recursive HP filter with a parameter λ corresponding to fluctuations lasting 10.5 years (see Lenart, Ł. and Pipień, M. (2015) and Pipień, M., Wdowiński, P. and Kaszowska, J. (2018))

Table 1 presents the variables whose monitoring is recommended by the European Systemic Risk Board (ESRB/2014/1, Recommendation C, paragraph 2). The levels of the variables compiled in Table 1, observed in 2025 Q1, do not indicate that there is a need to change the level of the countercyclical buffer over the level defined by the nCCyB.

Table 1. Summary of selected indicators monitored for the purposes of making decisions on the level of the CCyB

| Indicator | 2024 Q4 | 2025 Q1 |
|---|---------|---------|
| Credit to private non-financial sector to GDP (broad credit aggregate) | | 57.1% |
| Credit to private non-financial sector to GDP (narrow credit aggregate) | | 33.4% |
| Standardised credit gap (broad credit measure) | -19.6% | -19.6% |
| Standardised credit gap (narrow credit measure) | -14.4% | -14.0% |
| Credit gap taking into account the characteristics of the financial cycle in Poland (broad credit measure) | 0.9% | 0.9% |
| Credit gap taking into account the characteristics of the financial cycle in Poland (narrow credit measure) | 0.7% | 1.1% |
| Dwelling prices to income (index; average for 2015 = 100) | | 98.9 |
| Hedonic housing price index* (2006 Q3 = 100) | 298.2 | 302.0 |
| Current account balance as % of GDP | | -1.2% |
| Debt Service Ratio | | 6.5% |
| Contribution of the financial sector to GDP | 5.3% | 5.2% |
| Growth of a real broad credit measure (y/y) | | -1.2% |
| Growth of a real narrow credit measure (y/y) | | -1.4% |
| VIX (Volatility Index) – a measure of the implied volatility of options for the S&P 500 index | | 18.5 |

Notes: * (Harmonised) Hedonic House Price Index – price index per square metre of a secondary market apartment with 2006 Q3 basis = 100 for 7 cities (including Warsaw). It reflects a change in prices purged of qualitative changes (e.g. an increase/decrease in the share of higher quality (more expensive) apartments).

The updating of historical data does not affect the interpretation of results.

Source: NBP, BIS, Statistics Poland, Eurostat and Thomson Reuters.

4. Summary

The early warning model points to a slight increase in cyclical systemic risk. The intensity of cyclical risk implies the level of the buffer at 0.5%. Therefore, there are no grounds for raising the level of the CCyB over the adopted rate of the nCCyB (at the target rate of 2%, with a transitional stage at the rate of 1%).

Lending is recovering, but its pace is moderate and poses no threat to financial stability. The analysis of a number of additional indicators supports the conclusion that there is no rationale for raising the level of the buffer over the rate defined by the nCCyB.

