Executive Summary and Heatmap

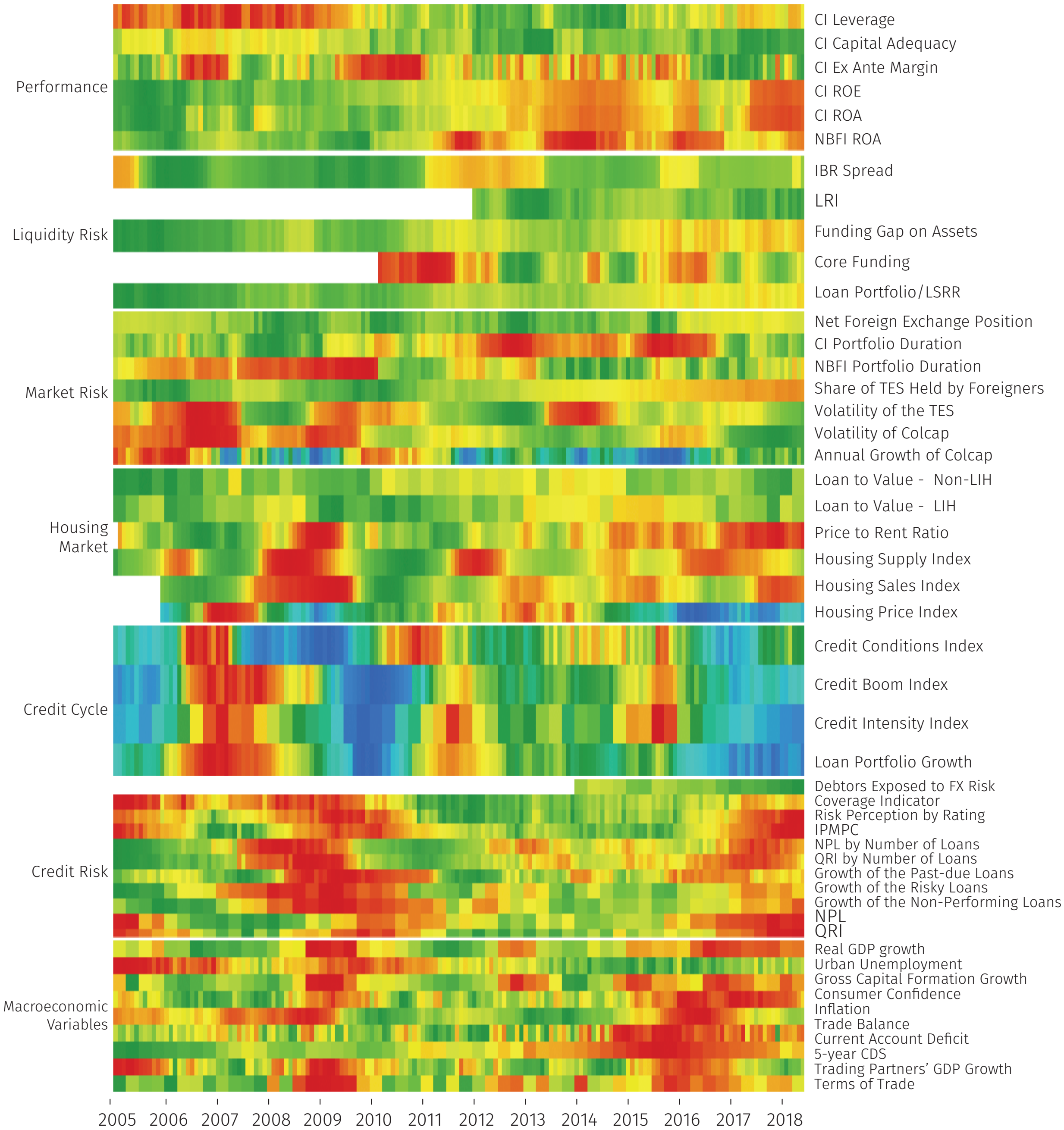
In the last few months, the Colombian financial system has continued to advance in its process of adjustment to the shocks experienced by the Colombian economy since mid-2014. This process has been characterized by the gradual materialization of credit risk (in the form of increases in non-performing and risky loans), low profitability (caused by greater loan-loss provisions expenditures), and low growth of the loan portfolio and of the funding sources of credit institutions. During this adjustment period, indicators of capital adequacy and liquidity remained persistently sound, an evidence of the resilience of the financial system.

As a result of the adjustment, the vulnerabilities that were identified in the previous edition of this Financial Stability Report, which were associated with the lagged effects of low economic growth on credit risk, have been gradually mitigated. Based on the analysis presented in Graph A,[1] the favorable change in the macroeconomic environment has made it possible for the relevant macroeconomic variables to gradually abandon red shades. In line with this, the growth rate of the non-performing and risky loan portfolios has declined (see Graph B). In any case, the indicators of profitability are in the red at the same time as the growth of the loan portfolio remains at low levels.

In this context, the main vulnerability that the financial stability of the Colombian economy currently faces is the risk of greater restrictions on international finance in a context of rising global interest rates and possible turmoil in emerging economies with its potential effect on aggregate demand. This vulnerability could affect the financial system through i) the higher loan-loss provisions expenditures for credit institutions that would be caused by a deterioration in the quality of the loan portfolio in a context in which the aggregate demand is adjusting, and ii) the possible valuation caused by eventual turbulences in international financial markets.

1 The technical details on the reading of, construction of, and variables used on maps A and B are presented in Box 1 of the September 2017 Financial Stability Report.

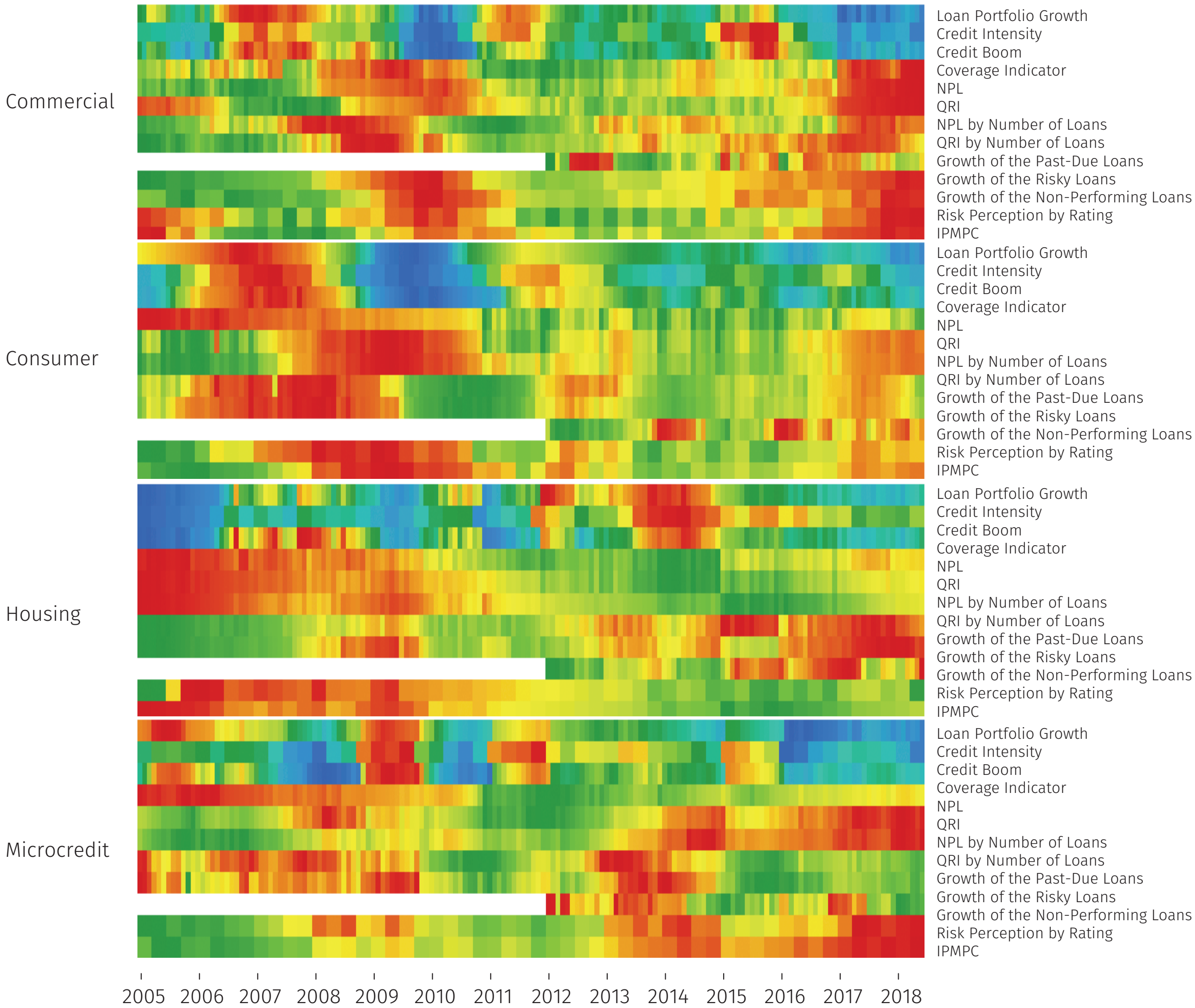
Graph A
Risk Heatmap of the Colombian Financial System



Source: *Superintendencia Financiera de Colombia* (hereinafter Office of the Financial Superintendent of Colombia), DANE, Fedesarrollo, Bloomberg, and *Banco de la República*, calculations by *Banco de la República*

In the domestic front, credit risk is continuing to materialize in economic sectors such as construction and agriculture and, to a lesser extent, in the housing loan portfolio. With regard to market risk, although both the fixed income and equity markets have had a favorable performance in the recent past (which is shown in different shades of green in the majority of the variables in this category in Graph A and in the performance of Non-banking Financial Institutions), there has been a recent rise in the share of medium-term public debt securities held by foreign investors. In the event of a withdrawal of these investors

Graph B
Map of Credit Risk



Source: *Superintendencia Financiera de Colombia* (hereinafter Office of the Financial Superintendent of Colombia), DANE, Fedesarrollo, Bloomberg, and *Banco de la República*, calculations by *Banco de la República*

from the local market, the impact would probably be seen most strongly in a broader segment of the yield curve of Colombian public debt.

In order to adopt a prospective approach in light of those vulnerabilities, chapter 3 of this Report presents a stress test that evaluates the resilience of credit institutions in the event of an extreme hypothetical scenario. The scenario includes a severe slowdown in the Colombian economy during the remainder of 2018 that would continue until mid-2020, rising constraints in international financial markets, materialization of credit risk in vulnerable sectors and foreign investors withdrawing from the local public debt markets. The results suggest that aggregate indicators of overall and core (Tier 1) capital adequacy would probably remain at levels exceeding the regulatory limits during the horizon of the scenario in spite of the potential declines in profitability and in the volume of the loan portfolio.

Banco de la República, in compliance with its constitutional objectives, will continue to monitor the situation of credit institutions and will take those decisions that will ensure levels of inflation and growth that are consistent with macroeconomic stability and long-term economic development. The analysis of the vulnerabilities presented in this Report constitutes a call to participants in the financial markets to make sure that the risks which they find themselves exposed to are evaluated and managed appropriately and prudently.

Juan José Echavarría
Governor