A. Introduction

1. Financial conditions play a significant role in shaping business cycle fluctuations. They reflect both the feedback of current and past economic conditions and markets' expectations about the economic outlook. Thus, there has been a concerted effort toward the continuous monitoring of financial conditions, leading to the development of financial conditions indices (FCIs). FCIs are constructed from a broader combination of domestic and external financial conditions. They serve as tools that facilitate a deeper understanding of macro-financial linkages, as well as enable historical assessments by comparing the current state of financial conditions against their past cycles. Beyond their contribution to the formulation of monetary policy, FCIs can provide important signals on the current state of financial conditions and their potential impact on economic activity.

2. FCIs can be considered as extensions of the monetary conditions indices (MCIs). Whereas the traditional MCIs are limited to the monetary policy stance and how it propagates through the economy, FCIs introduce the role of financial variables such as asset prices, long-term interest rates and liquidity indicators in determining the financial conditions at a given point in time. During periods of financial stress, FCIs can be a better indicator of financial conditions compared to traditional MCIs, thanks to their capacity to capture a wider range of financial dynamics. For instance, during the global financial crisis (GFC) and the Covid-19 shock, while monetary conditions remained loose due to relatively low policy interest rates, global financial conditions remained tight due to balance sheet constraints and increased uncertainty (see for example Angelopoulou and others, 2014 and Çolak and Öztekin, 2021).

3. Developing an FCI has become even more important as Qatar aims to further develop the financial sector through the Third Financial Sector Strategy (FSS3). In Qatar, the financial sector plays an important role in shaping economic activity, and therefore serves as a key pillar in fostering the country's sustainable economic development. The FSS3 aims to enhance innovation and diversification in the financial sector, and to support the country's goal to become a global financial services center. An FCI would be important in assessing the current state of financial health, gauging the impact of initiatives aimed at fostering financial market deepening, and evaluating the nexus between financial indicators and the distribution of future growth.

4. We develop an FCI for Qatar, employing two widely used methods. The principal components approach (PCA) and the weighted sum vector autoregression (VAR) approach (WSA-VAR). The PCA method is a statistical approach designed to extract a common factor from a broad array of financial variables. The WSA-VAR method quantifies FCIs based on their impact on Qatar's non-hydrocarbon GDP growth. We further explore the nexus between financial conditions and Qatar's future non-hydrocarbon economic activity through the growth-at-risk (GaR) framework. The GaR framework enables the assessment of how different aspects of financial conditions may influence short and medium-term growth prospects.

5. This paper is organized as follows. The next section provides an overview of the methodology for constructing the FCIs for Qatar. The subsequent section provides an overview of the FCIs for Qatar. The section after discusses the impact of financial conditions on non-hydrocarbon growth using the Growth-at-Risk (GaR) framework. The last section concludes.

B. Constructing a Financial Conditions Index for Qatar: Methodology

6. We employed the principal components approach (PCA) and the weighted sum VAR (WSA-VAR) approach to construct an FCI for Qatar. The PCA models the variance structure of the financial variables by extracting a common factor from a set of financial indicators that captures the optimal linear combination of the observed financial variables in the following representation:

$$\bar{X}_t - \mu = \beta F_t + U_t \quad (1)$$

Where, $\bar{X}_t$ is a *k* × 1 vector of variables' means, μ is the mean of the observables over the sample period, β is a *k* × *m* matrix of coefficients, F_t is a vector of *m* × 1 unobserved common factor and U_t is a *k* × 1 vector of errors assumed to be mean-zero stochastic processes. The factor F_t, is estimated using the principal component approach which involves minimizing the sum of squared residuals in Equation 2. The Bai and Ng (2002) selection criteria was used to determine the optimal number of common factors. We regress F_t on current and lagged non-hydrocarbon growth to purge any past influences of economic activity on the common factor, such that:

$$F_t = (AL)y_t + \varepsilon_t \quad (2)$$

Where $(AL)$is the lag operator that captures both the current and past non-hydrocarbon GDP growth rates, y_t is the year-on-year non-hydrocarbon GDP growth rates, and ε_t is the factor-based FCI, which captures only the exogeneous developments in financial conditions that would predict future non-hydro economic activity.

7. For the weighted sum approach, the determination of weights can follow one of two paths. The first assigns equal weights across all variables, resulting in the FCI being calculated as a simple average (Arrigoni and others, 2022). The second method allocates weights based on the variables' estimated impacts on real GDP growth, employing either a vector autoregressive (VAR) model or structural macroeconomic models. We employed the latter using a VAR framework. To this end, and following Swiston (2008), a weighted sum FCI was developed as shown in Equation 3:

$$FCI_t = \sum_{j=1}^{k} w_j (x_{jt} - u_j)\delta_j^{-1} \quad (3)$$

Where, weights were derived from the cumulative impulse-response functions of real non-oil GDP growth following a one-standard deviation shock to each variable. For any given period (t), the FCI was calculated as a weighted average of (k) distinct financial variables, denoted by x_{jt}, where w_j represents the weight assigned to each variable. The mean u_j and standard deviation δ_j of each financial variable were calculated over the sample period. To ensure a consistent scale for comparison and the removal of measurement unit influences, the variables considered were demeaned and standardized. To demean the financial variables, the sample average was subtracted from each variable, and to standardize, the demeaned series was divided by its standard deviation.

8. The choice of financial variables was determined by their significant impact on Qatar's non-hydrocarbon GDP growth. The weight, w_j, measures the relative importance of each financial variable to non-hydrocarbon GDP growth. The weight was estimated from a recursive VAR framework as the cumulative 18 - 24 months the impulse response of real non-hydrocarbon GDP growth to a one-unit shock to x_{jt} for the

period 2009 to 2023[2]. Data was converted into monthly frequency using the method developed by Chow and Lin's (1971). Nominal variables were converted to real terms by deflating the variables with the GDP deflator. Following a Cholesky decomposition, the identification of structural shocks assumed that domestic financial conditions do not have contemporaneous effects on growth, and that domestic developments do not contemporaneously affect external variables. Except for interest rates, all variables entered the model as growth rates. A lag length of one was selected for the VAR based on Schwartz Bayesian Criterion (SBC). We used the Augmented Dickey-Fuller tests to confirm the stationarity of the variables.

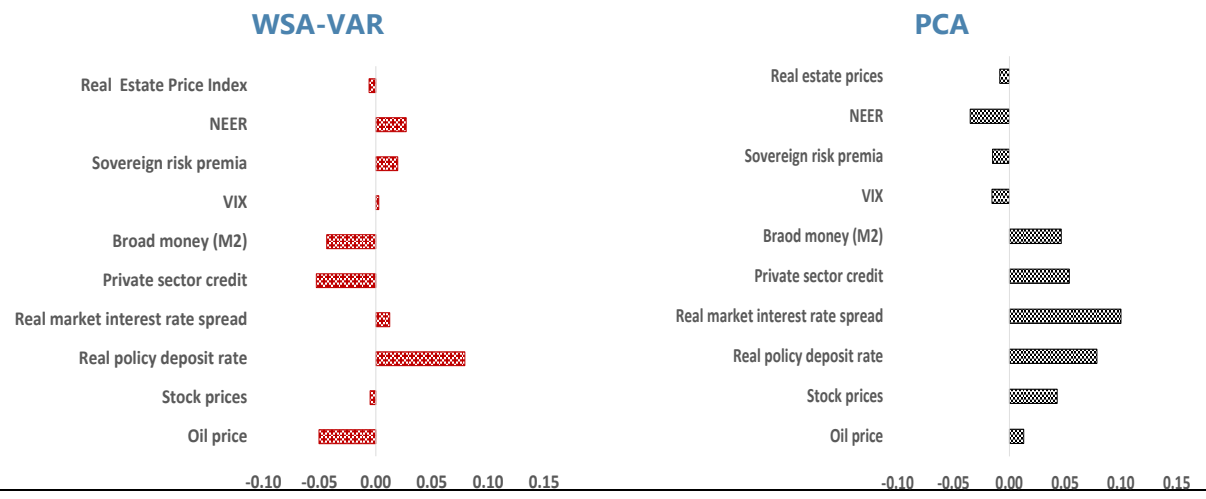
9. The variables included a combination of global and domestic factors. Global variables represent external financial conditions that could impact Qatar's economy, particularly through the financial sector's exposure to global developments. Domestic variables capture the various channels through which financial conditions affect the real economy. The global factors included a measure of global financial market uncertainty (VIX), the nominal effective exchange rate (NEER) and oil prices. Domestic factors included the real policy deposit rate, real market interest spreads (defined as the difference between real short-term lending rates and real short-term deposit rates), the growth rates of credit to the private sector, and money supply (proxied by broad money—M2). Other domestic factors included: the 5-year CDS spread to capture shifts in the sovereign risk premia; as well as stock and real estate price indices to offer insights into the developments within these asset classes.

C. The Financial Conditions Index for Qatar: An Overview

10. The WSA-VAR method yielded more consistent signs than the PCA approach. The weights derived from the VAR framework and the factor loadings obtained from the PCA are shown in figure 1. An increase in the index is interpreted as tightening of financial conditions, while a decrease suggests a loosening of these conditions. This implies that positive values of weights and factor loadings demonstrate a positive correlation with the Financial Conditions Index (FCI), and negative values imply a negative correlation with the FCI. Our prior is that the real policy interest rate, the real market spread, and the risk premium are positively related to the FCI; while money supply, private sector credit, and domestic stock and real estate price indices would be negatively related to the FCI. The impact of exchange rates on financial conditions is multifaceted. For instance, for a country with flexible exchange rate, a depreciation of the exchange rate could increase the local currency cost of dollar-denominated debt, thereby tightening financial conditions. On the other hand, through the traditional trade channel, a weaker domestic currency relative to the currencies of trading partners could ease financial conditions. Given Qatar's exchange rate peg to the US dollar, we expect a positive correlation between exchange rate (appreciation) and financial conditions (tightening). Heightened global financial market uncertainty, measured by the VIX, would lead to tighter financial conditions, while an increase in oil prices is expected to ease financial conditions for hydrocarbon-exporting countries such as Qatar. In the PCA analysis, indicators that contradicted our assumptions were removed, while those with smaller magnitudes were retained. Overall, the WSA-VAR approach yielded more consistent signs than the PCA method.

[2] Impulse response functions for the selected financial variables are presented in Annex I.

Text Figure 1. Qatar: Weights from the WSA-VAR and Factor Loadings from the PCA



Source: Haver Analytics, IMF WEO and IMF staff calculations.

11. The results suggest that the WSA-VAR approach outperforms the PCA. The estimated FCIs by the WSA-VAR and PCA methodologies are presented in Figure 2a. The FCIs from both methods broadly follow a similar trajectory, with a correlation of about 0.86. The weighted sum method has been found to effectively capture deep recessions stemming from shocks better than statistical methods such as the PCA (Arrigoni, 2022). Indeed, our results suggest that the WSA-VAR approach outperforms the PCA to predict shocks to financial conditions, particularly during significant shocks such as the oil price shock in 2015, the Covid-19 pandemic in 2020, and the subsequent easing of financial conditions post-pandemic. Furthermore, the WSA-VAR method appears to predict a tightening of financial conditions in 2023 more distinctly than the PCA.

12. The FCI can be decomposed to highlight the individual contributions of financial variables. The decomposition of the FCI into individual contributions of financial variables to the overall FCI is illustrated in Figure 2b. We decomposed the WSA-VAR FCI[3] to showcase variations in the contributions of individual financial variables over the sample period. Significant contributors to fluctuations in the aggregate financial conditions include domestic conditions such as the real policy deposit rate, monetary conditions (including credit and broad money) and external factors driven mainly by oil prices, with the FCI capturing key developments in the financial cycle. For example, during the global financial crisis of 2008–09, financial conditions significantly tightened, as evidenced by tightening equity prices, heightened sovereign risk premia, currency depreciation and a general tightening of the external conditions alongside easy domestic monetary conditions.

[3] Decomposition of the FCI under the WSA-VAR methods is simple and straight forward compared to the PCA method (see also Arrigoni, 2022). Moreover, the WSA-VAR FCI better predicts the historical developments in Qatar's financial sector than the PCA FCI.

Text Figure 2. Qatar: Financial Conditions Index (Z Score)

Figure 2a. Comparison of the WSA-VAR FCI & PCA FCI

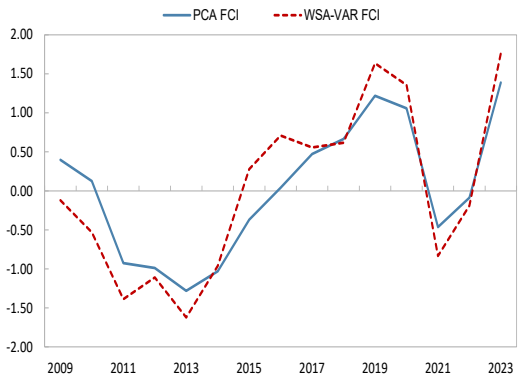
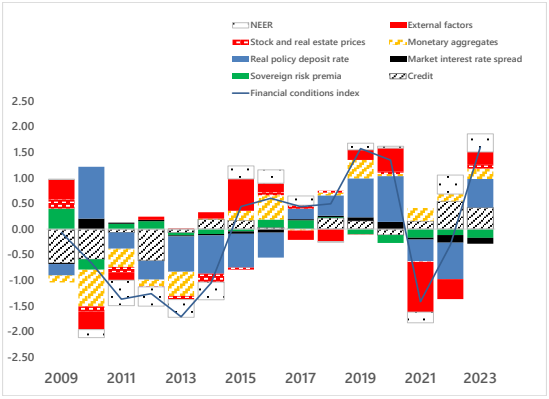


Figure 2b. Decomposition of the WSA-VAR FCI



Source: Haver Analytics, IMF WEO & IMF staff calculations
Notes: 1. A positive sign indicates tightening in the FCI, while a negative sign an easing.
2. All the variables are demeaned and standardized.
3. External factors include oil prices, VIX and nominal effective exchange rate (NEER).

13. The estimated FCI reflects a trend of eased financial conditions from 2010 to 2014, aligning with the post-global financial crisis recovery phase. A recovery after 2010 was disrupted by the oil price collapse starting in 2014 that led to another wave of tight financial conditions. Tight financial conditions persisted through 2020, compounded by the regional blockade in 2017 and the covid-19 shock. A brief period of post-pandemic easing in financial conditions followed (2021–2022), as elevated hydrocarbon prices brought in significant liquidity and the nominal increases in policy deposit rate in 2022 offset by higher inflation related to the World Cup. Financial conditions tightened again in 2023 as the real policy deposit rate increased (with lower inflation), hydrocarbon prices softened, and the global financial conditions deteriorated.

14. External conditions affecting Qatar's economy are predominantly shaped by fluctuations in oil prices. The major oil price cycles, notably the downturns in 2014 and 2020, as well as the subsequent recovery phase during 2021-2022, align with periods of tightened and eased financial conditions, respectively. The sovereign risk premia also closely capture significant developments, including the diplomatic rift with neighboring countries in 2017, which resulted in wider sovereign risk spreads, a downturn in stock market prices, and an overall tightening of financial conditions (see Annex 2 for details).

15. The FCI tracks non-hydrocarbon real GDP growth and the Qatar Central Bank (QCB)'s bank lending survey closely. The FCI demonstrates a relatively strong (negative) correlation with real non-hydrocarbon real GDP growth, signaling potential leading indicator properties of non-hydrocarbon economic activity, with a correlation of about -0.66 (figure 3a). Furthermore, the credit conditions component of the FCI closely mirrors the index from QCB's bank lending survey, as depicted in figure 3b. Analyzing the impact of the

FCI on real non-hydrocarbon growth, the impulse response functions presented in figures 3c and 3d indicate that tight financial conditions negatively affect both inflation and non-hydrocarbon GDP growth, as expected.[4]

Text Figure 3. Qatar: Evaluation of the FCI

Figure 3a. FCI and Real Non-hydrocarbon GDP Growth

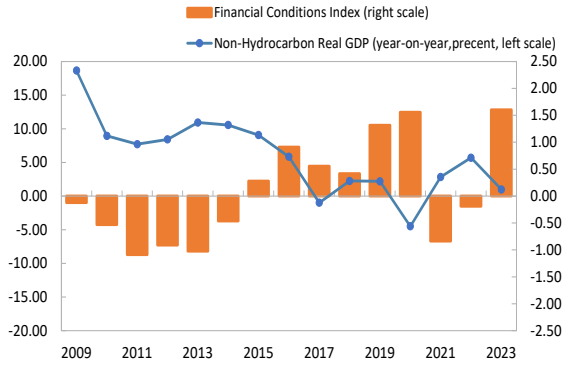


Figure 3b. Bank Lending Survey & the Private Sector Credit Conditions Index

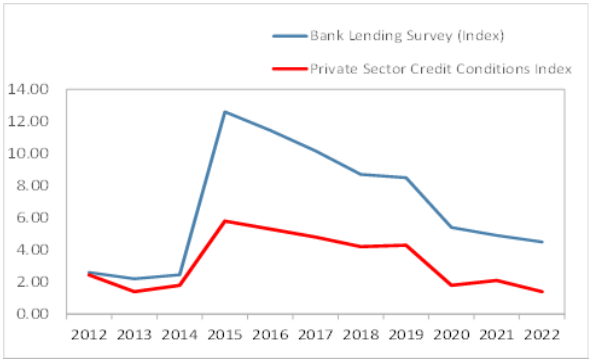


Figure 3c. Response of CPI Inflation to a Positive Shock in the FCI

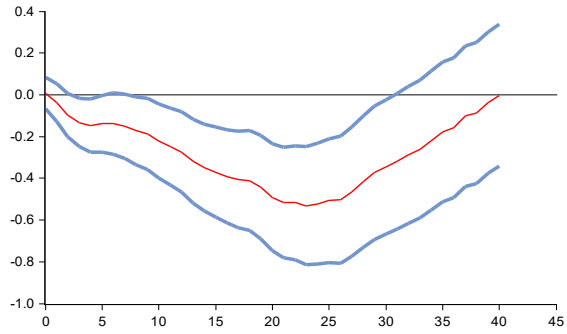
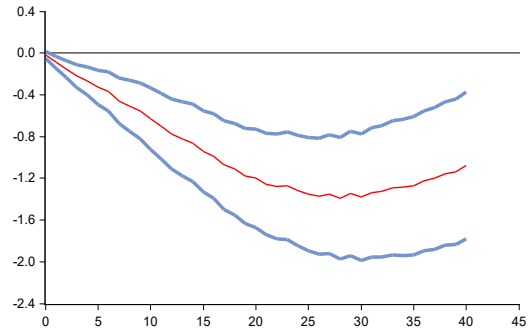


Figure 3d. Response of Non-hydrocarbon Real GDP Growth to a Positive Shock in the FCI



Source: Haver Analytics, IMF WEO, Qatar Financial stability Review, 2022 & IMF staff calculations
Note: A positive sign indicates tightening in the FCI, while a negative sign an easing.

D. Impact of Financial Conditions on Non-hydrocarbon Growth

16. Financial conditions can provide important signals about risks to future economic performance. The Growth-at-Risk approach links macro-financial conditions to the probability distribution of future GDP growth. Its primary strength lies in its ability to encompass the full spectrum of growth distribution, allowing for the assessment of both downside and upside risks. This approach not only allows for a comprehensive analysis of the key drivers of future GDP growth, it also helps to quantify the impact of risk on

[4] Our estimates show that tightening FCIs can reduce inflation on average by 0.3 and up to 0.5 percentage points after 2 years; and lead to a contraction in output by 0.8 to 1.0 percentage points, which is in line with the literature (Borracia and others, 2023).

future GDP growth (Busch and others, 2022). Recent studies have demonstrated that financial conditions are significant predictors of GDP growth risks over both short and medium term, but these predictive effects tend to diminish over longer term horizons (IMF GFSR 2017b; Prasad et al.,2019 and Busch and others, 2022).

17. The GaR methodology involves three key steps. Based on the Growth-at-Risk excel toolkit developed at the IMF (see Prasad, 2019 for details), our estimation approach followed three key steps. First, financial conditions indicators were partitioned into a predetermined number of subgroups using the linear discriminant analysis (LDA), a data reduction technique. Second, a model of future output growth was estimated as a function of current economic conditions and the partitioned financial conditions indicators using quantile regressions. Finally, the conditional quantile function (or inverse cumulative distribution function) was transformed into a probability density function by fitting a skewed t distribution. This probability density function was then exploited to quantify downside tail risks to future GDP growth.

18. The financial conditions indicators were partitioned into three subcomponents: domestic conditions (real policy deposit rate, real market interest spread, money supply, stock prices, real estate prices, and the sovereign risk premia), credit conditions (which included credit growth and credit- to- non-hydrocarbon GDP gap[5]) and external conditions (VIX, oil prices and the nominal effective exchange rate (NEER))—see annex table 1 for the variable classification. These financial variables were partitioned using the LDA approach, which links them with GDP growth during the dimensionality reduction process. Following this, FCIs for the three subcomponents, along with an overall FCI were estimated. The FCI generated via the GaR approach aligns closely with the FCIs estimated through the WSA-VAR and the PCA approaches, showing a bias toward the WSA-VAR FCI (see figure 4a). Also, as depicted in figure 4b, the FCIs for domestic, credit and external conditions accurately reflect developments in Qatar's financial sector since 2009, with domestic conditions, and external conditions dominating the FCI.

19. Financial conditions indicators were mapped on a probability distribution of future growth outcomes. Following the approach in IMF 2017b, the conditional density forecast of future GDP growth on current financial, credit and external conditions was estimated using quantile regressions:

$$Q\left(y_{t+h,}q\right) = \propto_y^q y_t + \propto_p^q dom\_cond_t + \propto_c^q credit\_cond_t + \propto_e^q ext\_cond_t + \varepsilon_{t,h}$$

The quantile regressions regress future GDP growth on current growth (y_t), domestic conditions (dom_cond), credit conditions (credit_cond) and external conditions (ext_cond), where q indicates the quantile level and h the forecast horizon (in quarters). The regression is fitted on a set of quantiles (0.10, 0.25, 0.50, 0.75, 0.90) for forecast horizons of 4, 8 and 12 quarters, to consider the impact of financial conditions on non-hydrocarbon growth density forecasts at different horizons. The domestic conditions, credit conditions, and external financial conditions are included separately in the quantile regressions to investigate the relative significance of each dimension of financial conditions for signaling risks to the near- and medium-term growth outlook.

[5] Credit to non-hydrocarbon GDP gap was defined as the deviation of the credit-to-non-hydrocarbon GDP ratio from trend. It was computed using Hodrick-Prescott filter. Results were robust to using the credit impulse, defined as the ratio between the annual change in credit and the nominal non-hydrocarbon GDP of the previous year.

Text Figure 4. Qatar: Financial Conditions Index—GaR Approach

Figure 4a. Comparison of FCIs (WSA-VAR, PCA & GaR)

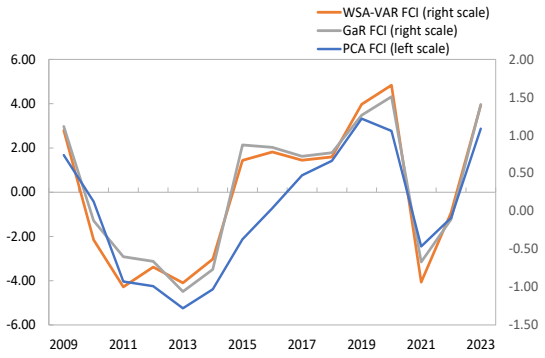
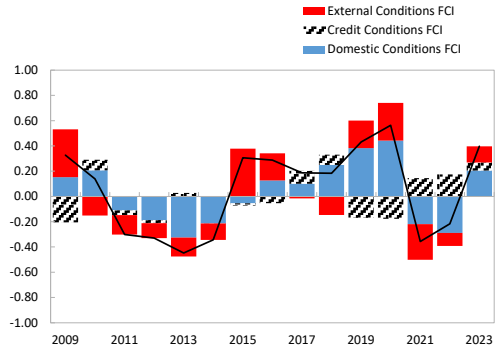


Figure 4b. Decomposition of the GaR FCI

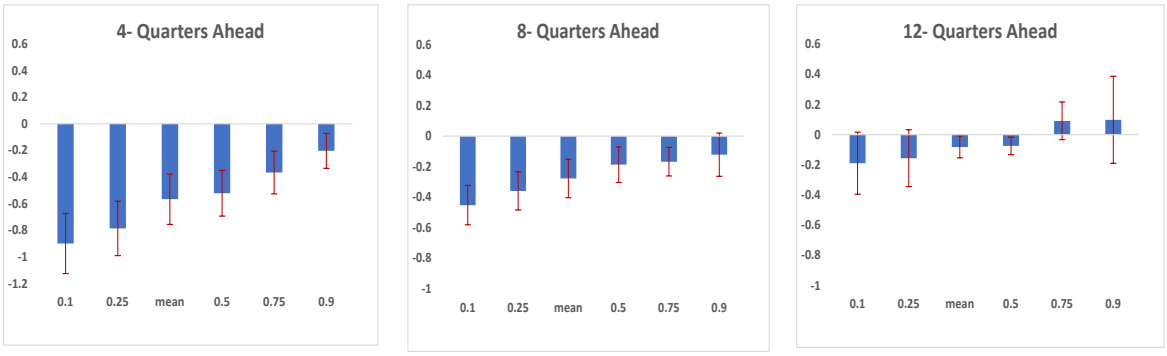


Source: Haver Analytics, IMF WEO, and IMF staff calculations
Notes: A positive sign indicates tightening in the FCI, while a negative sign an easing.

20. Both domestic and external conditions matter for growth of the non-hydrocarbon sector. The quantile regression results shown in Figure 5 indicate that tight domestic conditions, primarily driven by high short-term interest rates, have a more pronounced effect on the non-hydrocarbon growth outlook, resulting in a decline in the lower quantiles of the GDP growth distribution over the next 4 to 8 quarters. This suggests that the tightening of domestic conditions is likely to shift the non-hydrocarbon GDP distribution to the left than around the median, reflecting asymmetrical output responses to changes in these conditions. This effect tends to diminish over longer periods as conditions improve. While its impact is relatively minor, the deterioration of credit conditions—due to high funding costs and subdued demand—has led to credit growth falling below potential, contributing to short-term risks; however, these effects are anticipated to lessen in the medium term as conditions improve. Additionally, tight external conditions, mainly caused by fluctuations in commodity prices, had a significant negative impact on the overall outlook for non-hydrocarbon growth. These findings align with other studies (IMF GFSR, 2017b chapter 3, Adedeji et al., 2019 for GCC).

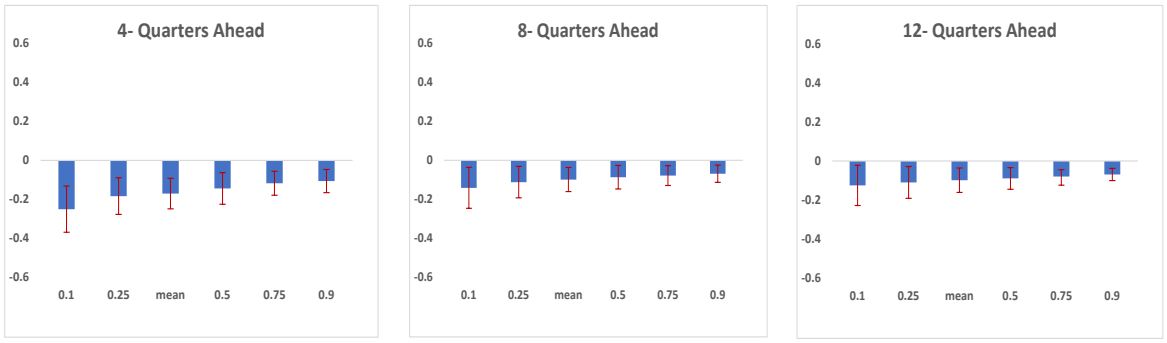
Text Figure 5. Qatar: Coefficients from Quantile Regressions of Financial Conditions on Future Non-Hydrocarbon GDP Growth.

Domestic conditions



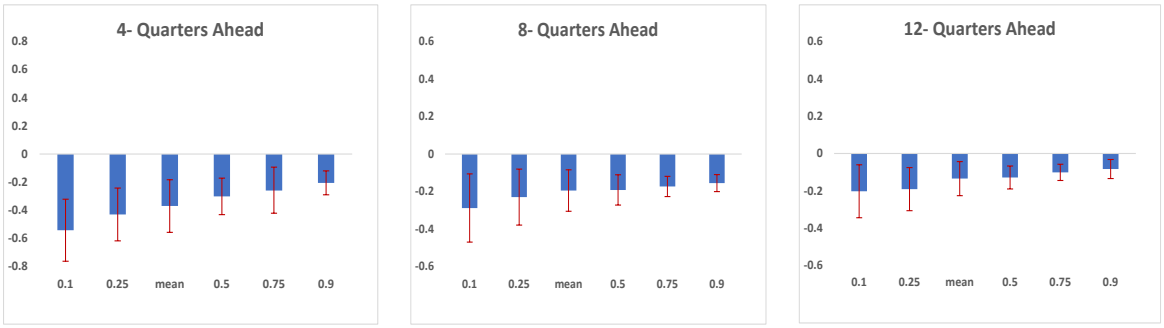
Source: Haver Analytics, IMF

Credit conditions



WEO, and IMF staff calculations

External conditions

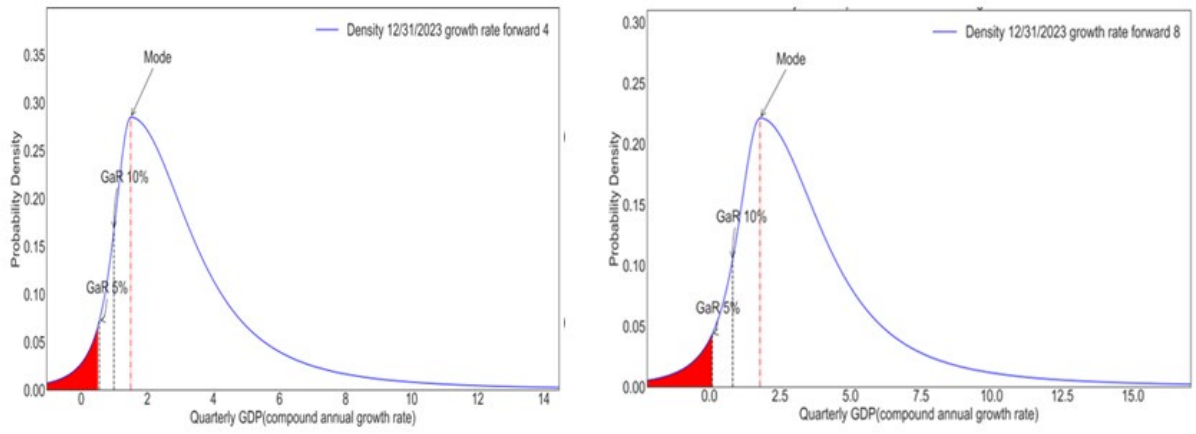


Notes: Panel A reports the coefficients with their corresponding 95% confidence intervals from a regression of GDP growth against domestic conditions. Panel B shows the results from the same estimation for credit conditions. Panel C shows the results for external conditions. The x -axis represents the non-hydrocarbon GDP growth quantiles corresponding to each coefficient, whose scale is depicted in the y -axis.

21. To quantify downside tail risks to Qatar's future non-hydrocarbon growth, a t-skewed distribution was fitted on the empirical conditional quantile function for each forecast horizon. The detailed methodology is discussed in IMF (2017b). The distributions were calibrated so that the mode (the most likely outcome) is consistent with IMF staff's baseline forecast for Qatar's non-hydrocarbon growth, which is set at [1.5] percent for 2024 and [1.9] percent for 2025. By employing the t-skewed fitted curve approach, a probability density function was derived for Qatar's future non-hydrocarbon growth, for 4 and 8 Quarters ahead (i.e. 2024 and 2025).

22. The GaR model suggests only mild risks surrounding the baseline projection for Qatar's non-hydrocarbon growth. Under the current IMF staff's baseline distribution, the maximum expected non-hydrocarbon growth rate that would be realized in a severely adverse growth scenario, if GDP growth falls below the 5th percentile of its expected distribution would be 0.5 percent and 0.1 percent in the 4 Quarters and 8 quarters ahead, respectively. This suggests a relatively mild risk outlook for the short- to medium term (refer to figure 6 below).

Text Figure 6. Qatar: Probability Densities of GDP Growth Four and Eight Quarters Ahead



Source: IMF staff calculations

23. The GaR model can also be used to assess how shocks to selected variables are likely to affect the distribution of future growth.

- **Impact of monetary policy easing:** Policy rates in Qatar generally follow the US Fed rates, consistent with the peg to the US dollar[6]. In line with the US Fed funds rate easing cycle, we assumed a 100 basis-point reduction in the policy deposit rate by end of 2024, while holding the other factors constant[7]. Results in figure 7 show that a 100 basis-point reduction in the policy deposit rate improves average future growth with the rightward shift in the peak of future growth distribution, with a significant reduction in the GaR at 5% percentile growth. Results also indicate that, in line with other studies, the maximum impact of accommodative conditions would be realized in the near term

[6] The QCB reduced the policy rate by 0.55 bp following the 0.5bp cut in the US Fed rate in September 2024.
[7] We expect the shocks to propagate to the future growth distribution in a non-linear way, as the beta coefficients differ by quantile.

(around 0.4 percentage points higher), whereas effects tend to dissipate in the long term (IMF GFSR, 2017b, IMF 2019 and Adedeji and others, 2019 for GCC).

Text Figure 7. Qatar: Impact of a 100 Basis-Point Reduction in the Policy Deposit Rate

Figure 7a. 8 Quarters Ahead

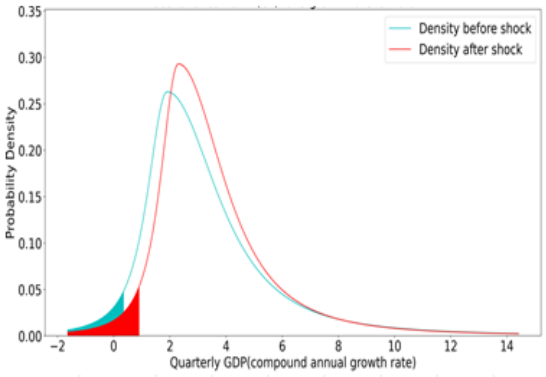
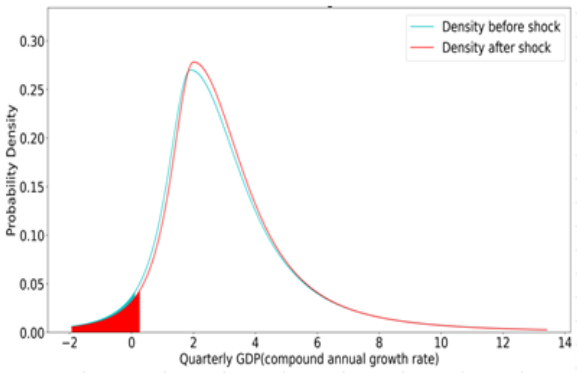


Figure 7b. 12 Quarters Ahead



Source: IMF staff calculations

- **Impact of external conditions:** As a commodity exporter, Qatar is susceptible to volatility in commodity prices and global uncertainty. As such, we applied one-standard deviation shocks to oil prices and VIX (measure of global financial market uncertainty), separately, while holding other factors constant. A negative shock to oil prices would aggravate risks to non-hydrocarbon growth outlook leading to a leftward shift in the peak of future growth distribution. The magnitude of the shock could cost about 0.3-0.4 percentage points non-hydrocarbon growth for Qatar, with GaR at 5 percent declining to about -0.1, implying an elevation of risks to the outlook (figure 8a). This is in line with other studies on GCC (see for example Adedeji and others, 2019). Results also suggest that global financial market uncertainty could amplify downside risks to future non-hydrocarbon GDP growth. Although its impact is marginal[8], results in figure 8b show that the VIX leads to a leftward shift in the peak of the future growth distribution and GaR slightly worsens.

[8] This could be attributed to relatively less developed financial markets in Qatar, leading to a small contribution of the VIX to non-hydrocarbon growth (annex 1). The impact could be higher with a measure that captures the entire spectrum of global uncertainty. Yet, the VIX only captures global financial market uncertainty (for details see Chapter 2 GFSR October 2024).

Text Figure 8. Qatar: Impact of a Reduction in Oil Prices and Increase in Global Financial Market Uncertainty.

Figure 8a. Oil Prices

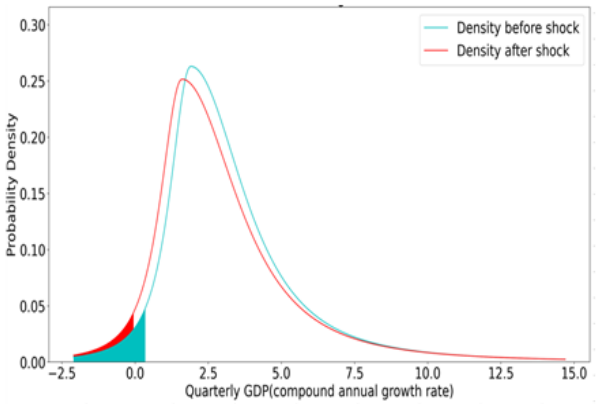
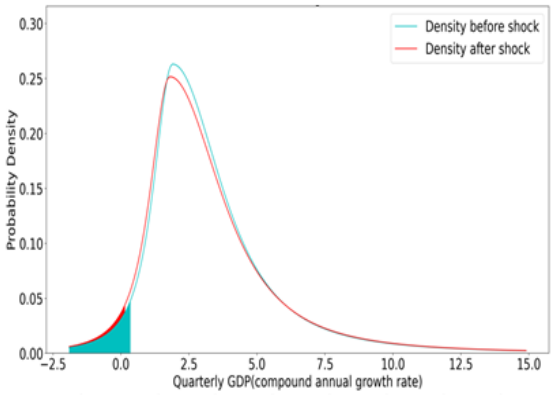


Figure 8b. Global Financial Market Uncertainty (VIX)



Source: IMF staff calculations

E. Conclusions

24. This paper develops a financial condition index for Qatar using different approaches. The FCIs derived from the WSA-VAR, PCA, and GaR approaches are closely aligned and exhibit a high correlation. As Qatar seeks to enhance the financial sector's contribution to growth through the Third Financial Sector Strategy, a financial conditions index will be essential for assessing the current state of financial conditions and evaluating the relationship between financial indicators and future growth distribution.

25. The analysis shows that the financial conditions index is an important leading indicator of Qatar's non-hydrocarbon growth and closely follows QCB's bank lending survey. The FCI exhibits a relatively strong correlation with real non-hydrocarbon GDP growth, highlighting its predictive potential for future economic performance. Additionally, the credit conditions component of the FCI aligns with the QCB's bank lending survey, indicating consistency of our FCI with other surveys.

26. The GaR analysis highlights the importance of domestic and external conditions as indicators of real non-hydrocarbon GDP growth performance. Domestic conditions seem to offer the strongest signal in the short term, whereas the effects of external conditions are significant in both the short and medium term. Overall, the current downside risks to Qatar's baseline non-hydrocarbon growth projections are relatively mild. Alternative scenario tests indicate that future non-hydrocarbon growth could improve following a reduction in the policy deposit rate. Additionally, non-hydrocarbon growth is primarily influenced by oil prices, with minimal effects stemming from global financial market uncertainty.

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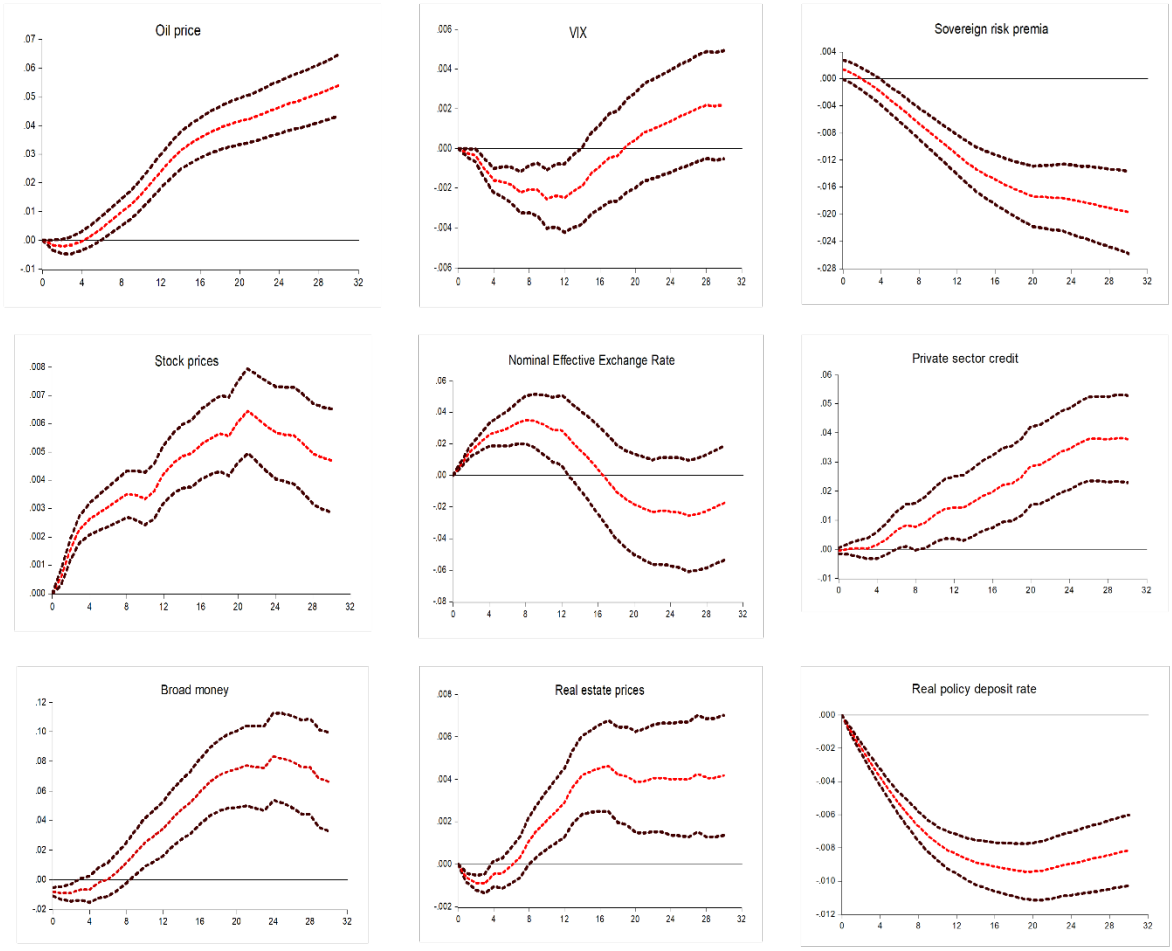
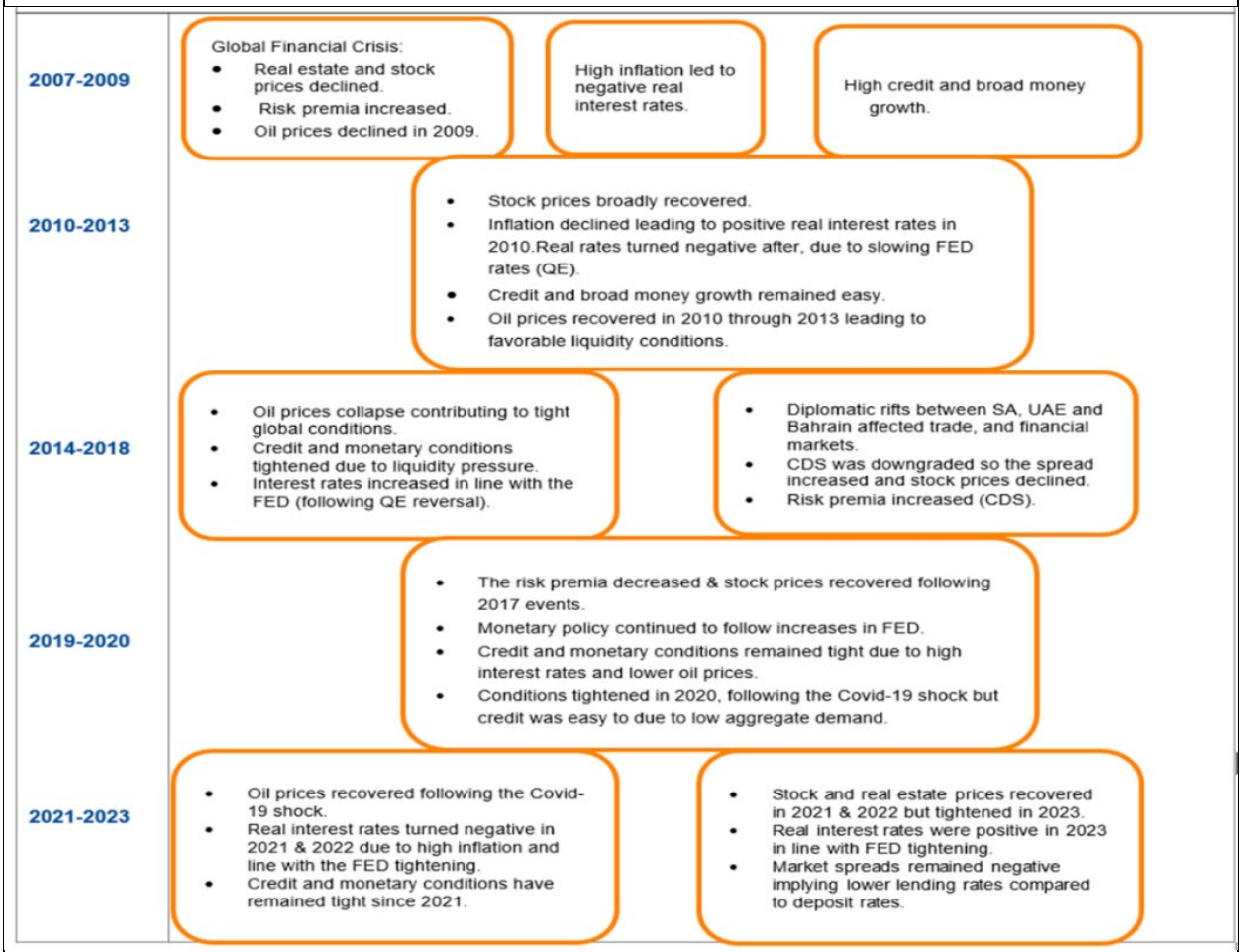
Annex I. Response of Real Non-Hydrocarbon GDP Growth to Shocks from Selected Financial Variables



Source: IMF staff calculations

Annex II. Summary of Factors Driving the FCIs

Annex II. Figure 1. Qatar: Summary of Factors Driving the FCIs



Source: IMF Qatar Article IV Staff Reports 2007-2023

Annex II. Table 1. Qatar: List of Partitioned Financial Variables

Domestic conditions	Credit conditions	External conditions
▪real policy deposit rate ▪real market interest spread. ▪Broad money (M2) ▪stock prices ▪real estate prices ▪sovereign risk premia	▪credit growth (y/y), ▪credit- to- non-hydrocarbon GDP gap /credit-to-non-hydrocarbon impulse	▪oil price ▪VIX ▪nominal effective exchange rate (NEER)

Source: Haver Analytics, IMF WEO and S&P.