*Transmission of Financial Conditions to Fixed Investment in India: An Empirical Investigation**

*by Sunil Kumar^, Sarthak Gulati^ and Deepmala^*

In this article, dynamic factor model (DFM) and vector auto regression (VAR) approaches are used to construct financial condition indices (FCIs). Further, the impact of financial conditions on investment growth in India is gauged using generalised method of moments. Our analysis finds that financial conditions impact investment growth with a lag, and there is also evidence of an asymmetric impact of the financial conditions.

Introduction

Investment is one of the main drivers of aggregate demand, as evidenced by its contribution in real terms to aggregate demand at about 36 per cent during the recent period (2011-12 to 2019-20). It remains pivotal to durable growth as well as enhancing the growth potential especially given its high multiplier impact. Investment activity depends upon several factors such as demand conditions, capacity utilisation, monetary and financial conditions, infrastructure facilities and overall business and investment climate. In India, numerous policy measures have been undertaken by the government in the recent years to strengthen investment activity in the economy. These include National Infrastructure Plan (NIP) amounting to ₹100 lakh crores and the National Monetisation Pipeline (NMP) involving ₹6 lakh crore - both targeted for completion by 2024-25. Production linked incentive (PLI) scheme, introduced by the government in March 2020, is also aimed at boosting investments in India through a thrust on incentivising domestic manufacturing. On financial conditions, it may be noted that monetary policy had moved into an easing cycle in February 2019. Consequently, domestic financial conditions eased considerably as reflected in large drops in interest rates/spreads across the spectrum and ample surplus liquidity in the system. Before these congenial financial conditions could have had some tangible impact on investment, COVID-19 pandemic struck in early 2020 and economic activity received a massive jolt and experienced a large contraction during the first half of 2020-21. The Indian economy, however, emerged out of contraction during the second half of 2020-21 on the back of fiscal support and benign financial conditions, among others; however, investment activity, particularly private sector capex, continued to remain muted. The monetary policy stance moved towards withdrawal of accommodation in April 2022 in view of high inflation. In this milieu of shifting financial conditions, this paper examines the relationship between financial conditions and investment growth in India.

While most studies use an interest rate as a summary indicator of financial conditions, it may not be able to capture overall financial conditions that impact investment. The relevant financial variables that matter for investment activity can be captured by summarising several related indicators such as short-term interest rates, bond yields, liquidity conditions, risk premia, equity markets, credit growth, lending interest rates, *etc.* into a summary financial conditions index (FCI). In theory, FCI may include any variable that characterises the supply or demand for financial instruments relevant for the economic activity. FCI summarises information about the current and future state of the economy contained in these current financial variables. Early research on financial conditions centred on the slope

^ The authors are from the Monetary Policy Department (MPD).

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of the yield curve; studies published in the late 1980s and early 1990s found the yield curve to be a reliable predictor of economic activity (Estrella and Hardouvelis, 1991; Harvey 1988; Laurent 1989; Stock and Watson, 1989). Subsequent studies expanded the ambit of financial conditions by including the relevant variables from different financial markets (money, debt, equity, and foreign exchange). There are two different channels through which financial conditions affect investments: a direct impact on the level of corporate investments and an indirect impact through alleviating external financing constraints (Wang, Jianxin, 2013). While the direct impact is driven by higher margins/profits (lower cost of funds) and growth opportunities, the indirect impact works by providing varied financing choices to firms facing external financing constraints. The easing financial conditions are supposed to catalyse investment activity and boost growth in the economy, whereas opposite impact is expected in case of tightening of financial conditions.

Against the above backdrop, this study attempts to empirically investigate the transmission of financial conditions to investment in India. Dynamic factor model (DFM) and vector auto regression (VAR) approaches are used to construct financial condition indices (FCIs). Five variables – government securities (G-Sec) 10-year benchmark yield, corporate AAA bonds spread over G-sec yields, Nifty 50 performance, repo rate and net foreign portfolio flows have been shortlisted for constructing tailored FCIs for investment activity based on correlation and turning point analysis. The impact of financial conditions on investment growth is gauged using a generalised method of moments (GMM) model to address endogeneity issues. It is widely acknowledged that economic relationships display asymmetric adjustment paths (e.g. Neftci, 1984; Enders and Granger, 1998). We, therefore, examine the prevalence of such asymmetric phenomenon through quantile regression to model the relationship between FCI as predictor (independent) variable and specific quantiles of investment growth as target (dependent) variable. The analysis finds that financial conditions impact investment growth with a lag, and there is also evidence of an asymmetric impact of financial conditions on investment activity. The remaining part of the paper has the following structure. Section 2 provides a snapshot of the extant literature on the subject. The details regarding construction of FCI are furnished in Section 3. Section 4 contains methodology and empirical results pertaining to transmission of financial conditions to investment growth. Concluding observations are delineated in Section 5.

II. Literature Review

The nexus between finance and investment has received a fair amount of attention both in theoretical and empirical literature. Theory suggests that financial instruments, markets, and institutions mitigate the effects of information and transaction costs - differences in how well financial systems reduce information and transaction costs influence saving rates, investment decisions, technological innovation, and long-run growth rates. The earliest theoretical underpinning of the finance–growth connection can be traced to Schumpeter (1912), who argues that banks play an important role in the adoption of new technologies. Most growth models emphasise on the role of financial development in mobilising savings and transmission to investment and growth (Muyambiri and Odhiambo, 2016). The nexus between finance and investment is also considered in endogenous growth models through liberalisation of markets leading to higher domestic investments. Caporale *et al.* (2003) find investment productivity to be the channel through which stock market development enhances the growth rate in the long run.

Financial development encompasses different facets and conditions, which mainly characterise availability and cost of funds in different markets (*i.e.*, credit, equity, debt, and foreign exchange). The trends in the various indicators of financial conditions can be better summarised by constructing an index and exploring its relationship with macroeconomic indicators including investment, growth and inflation (Gauthier *et al.* 2004, Matheson 2011, Gumata *et al.* 2012, Kongsamut *et al. 2017*). Goodhart and Hoffman (2001) construct financial conditions index (FCI) for G7 countries using three approaches: an IS-curve-based model, impulse-response functions, and factor analysis. They find that house and share prices have a substantial weight in FCI and the derived FCIs contain useful information about future inflationary pressures. Gauthier *et al.* (2004) find that FCI is better than monetary condition index (MCI) in explaining and predicting near-term GDP growth in Canada[1]. Matheson (2011) constructs FCIs for the United States and the euro area using a dynamic factor model (DFM) and finds that FCIs can serve not only as a summary measure of the financial conditions but also provide useful information about the evolution of economic activity. Gumata *et al.* (2012) use the principal component approach (PCA) in constructing FCIs for South Africa and find them to contain powerful predictive information for the near-term GDP growth (up to four quarters). Kongsamut *et al.* (2017) construct FCIs for France to understand movements in GDP and its components. Tailored FCIs (*i.e.*, specific FCI for each target variable) are found to be useful as leading indicators of GDP, investment, and exports, and a contemporaneous indicator of private consumption. The indices contain useful information on macro-financial linkages in France and improve the accuracy of quarterly forecasting models and high frequency "nowcast" models.

In the Indian case, a few studies have constructed FCIs and examined their relationship with key macro indicators. Pradhan and Rudra (2009) explore the relationship between financial development and economic growth in India. Carolina *et al.* (2011) develop FCI for 13 Asian Economies including India and find that FCI has predictive power in forecasting GDP growth. Anand (2014) constructs FCI for India, summarising information content of the money, bond, foreign exchange and the stock markets. Following UNDP's methodology to calculate human development index (HDI), Sahoo (2017) constructs the FCI by taking call money rate, exchange rate, FDI inflows and house price and examines its empirical performance to predict inflation and GDP growth. Khundrakpam *et al.* (2017) estimate FCIs for India employing two alternative approaches — Vector Autoregression (VAR) and PCA — and find that PCA-based FCI outperforms VAR-based FCI in predicting GDP growth. Patra *et al.* (2021, 2022) investigate the relationship between yield curve and economic activity. MacDonald *et al.* (2022) examine the impact of cyclical financial conditions on GDP growth using a growth-at-risk (GaR) approach.

Further, the asymmetric behaviour of various important indicators in changing macroeconomic conditions has received ample attention in the literature. Beaudry and Koop (1993) find that positive shocks to U.S. GDP are more persistent than negative shocks, indicating asymmetric business cycle dynamics over different quantiles of the innovation process. Adrian, Boyarchenko and Giannone (2019) rely on quantile regressions to analyse the conditional relationship between future GDP growth and current financial and economic conditions. Kwark and Lee (2020) examine the asymmetric effects in Korea using quantile regression and find little effect of the current financial conditions on the upside risk (right tail) of the next quarter's GDP growth but a significant effect on the downside risk (left tail).

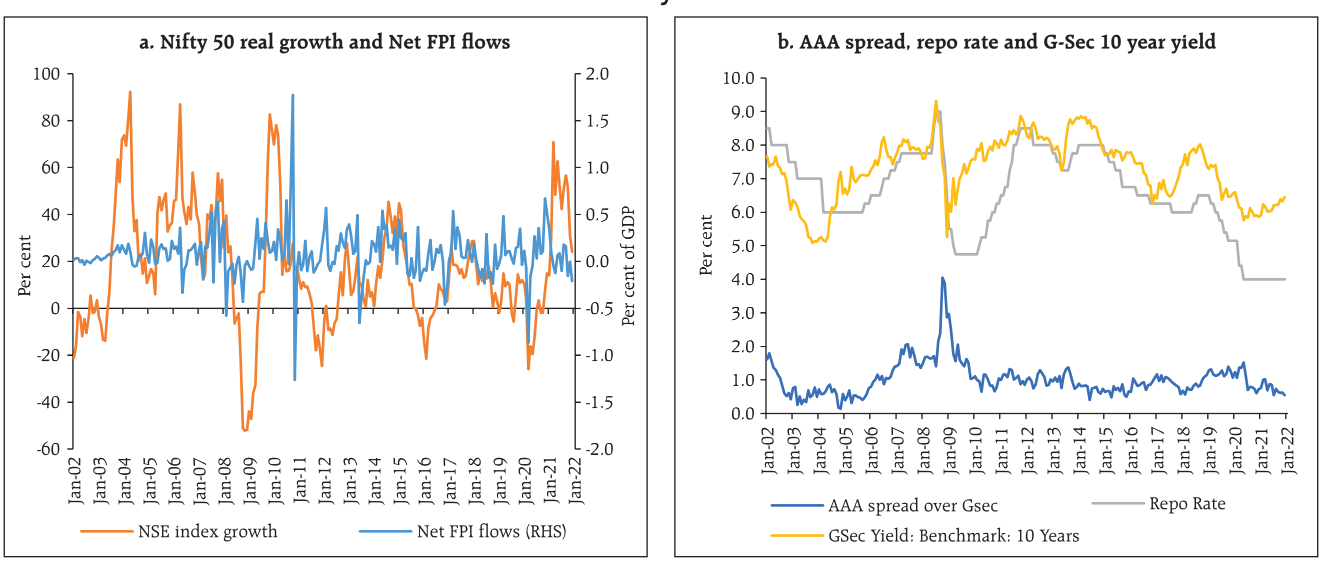
[1] The MCIs focus on interest rate and exchange rate movements, the key channels through which monetary policy affects aggregate demand. On the other hand, the FCI also contains asset prices and spreads that also impact aggregate demand.

III. Construction of Financial Conditions Index (FCI)

FCIs summarise the state of financial conditions and are typically based on the current value of financial variables, but some consider lagged variables as well. Most FCIs include some measure of short-term interest rates, long-term interest rates, risk premia, equity market performance, and exchange rates. We have constructed a tailored FCI using the financial variables relevant for investment activity in the in the economy for the period 2001-02:Q4 to 2021-22:Q3 given the objective of this study.

The methodologies for constructing FCI used in literature can be classified into two broad groups: a weighted-sum approach (Goodhart and Hofmann, 2001; Gauthier *et al.*, 2004) and a factor model approach (Brave and Butters, 2012; IMF FCI, Matheson, 2012; Hatzius *et al.*, 2010 and IMF, 2017). In the weighted-sum approach, the weights on each financial variable are generally assigned based on the estimate of its relative impact on real macroeconomic variable(s). In the second approach, common factors from a group of variables are extracted using PCA and/or dynamic factor modelling (DFM). The factor that captures the highest common variation among variables is either used as a FCI or is added to the central bank policy rate to construct FCI (the latter method is a combination of the weighted-sum approach and factor approach). In this study, we construct FCI using both approaches. VAR approach is used to estimate the weights of financial variables, while DFM is estimated to extract the common factor(s). FCIs constructed with both approaches are used to track the state of financial conditions over time and examine its relationship with investment [gross fixed capital formation (GFCF)] growth using time series data. The preliminary analysis examined 12 financial variables to construct FCI for India[2]. Of these, five variables – G-Sec 10-year benchmark yield, corporate AAA 10-year bond spread over G-Sec 10-year benchmark yield, Nifty 50 y-o-y returns in real terms, repo rate and net foreign portfolio flows as per cent of GDP – are selected based on their correlation with and sign of impact on GFCF growth (Chart 1 and Annexure Table 2).

Chart 1: Stylised data



Source: RBI; Bloomberg; and NSE.

[2] Variables considered for construction of FCIs include - Weighted average call money rate, AAA rated 10 year bond spread over 10 year G-Sec yield, foreign portfolio flows as per cent of GDP, performance of Nifty50 Index, USD-INR exchange rate, government securities (G-Sec) 10-year benchmark yield, Brent oil price, USA 10-year G-sec yield, performance of S&P 500 index, bank credit growth, repo rate and 91-day treasury bill rate.

The variables in monthly frequency are standardised and checked for stationarity with Augmented Dickey-Fuller (ADF) unit root tests (Annexure Table 1). DFM is applied as a dimension reduction technique using factor analyser module of Python. Initial tests – Bartlett's test of sphericity to check that dataset is not an identity matrix; and Kaiser-Meyer-Olkin (KMO) measure to check sampling adequacy – are undertaken before modelling the DFM. Further, we apply maximum likelihood (ML) method to fit factors to the observed data with visual screen plot analysis and decide on using two factors (Table 1). Based on loading of variables in two factors, the first FCI (FCI_DFM) is constructed. The quarterly frequency of FCI is calculated by taking average of monthly FCI.

In the weighted-sum approach, we follow Konsgsamut *et al.*, 2017 and derive the weights by estimating a VAR model with GFCF growth and financial variables used to construct FCI. The following VAR equation is estimated:

$$X_t = \alpha + \sum_{i=1}^{p} X_{t-1} + \epsilon_t$$

where, X is a vector of jointly determined stationary variables: GFCF growth, government securities (G-Sec) 10-year benchmark yield, corporate AAA bonds spread over G-Sec yields, Nifty 50 performance, repo rate and net foreign portfolio flows as per cent of GDP on a quarterly frequency.

Table 1: Factor loadings

	Factor 1	Factor 2
AAA spread over G-Sec	0.04	0.47
NSE index growth	-0.03	-0.54
Repo rate	0.69	-0.03
Gsec Yield: Benchmark: 10 Years	0.70	0.02
Net FPI flows (per cent of GDP)	0.13	-0.37

Source: Authors' calculations.

Table 2: VAR weights

Variable	Cumulative impact	Weights
AAA spread over G-Sec	-2.35	1.00
G-Sec Yield: Benchmark: 10 Years	-3.45	1.46
NSE index growth	3.45	-1.47
Net FPI flows (per cent of GDP)	4.24	-1.80
Repo rate	-0.25	0.11

Source: Authors' calculations.

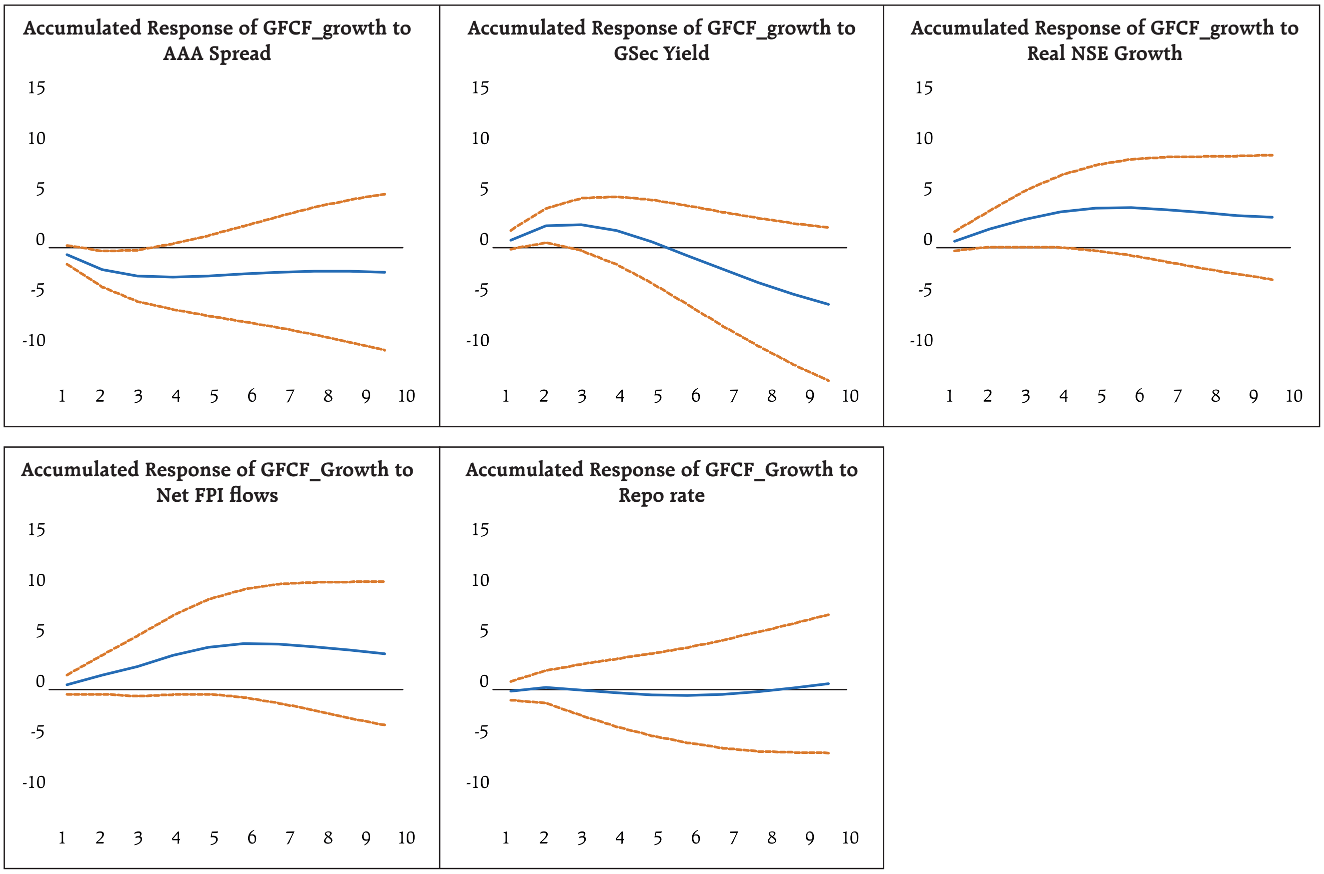
In the impulse response function approach, the accumulated impact of the financial variables on GFCF growth over 8 quarters is used as their weights (Table 2; Chart 2). Furthermore, the generalised impulse responses are used to address concerns of the sensitivity of VAR results to the ordering of variables. The derived weights from VAR model are applied on the standardised financial variables to construct the second FCI (FCI_VAR)[3] [Chart 3].

While FCI_VAR index is more volatile, both indices exhibit a co-movement and indicate tightening of financial conditions during 2008-09 (the global financial crisis period) and 2012-13 (the period of high inflation and monetary tightening). Increase in FCI indicate tightening of financial conditions, while decline in FCI values suggest easing of financial conditions. FCI_VAR suggests more tightening of financial conditions during 2016Q4 and 2018H2 (NBFC crisis), reflecting the fall in equity prices and portfolio outflows by foreign investors. The significant easing of financial conditions post-2020, driven by repo cuts, increase in equity return, decrease in AAA spreads and sharp increase in net foreign portfolio flows are appropriately captured by both FCIs.

[3] $FCI\_VAR = \sum_{i=1}^{m} w_j \left(\frac{x_{j,t} - \hat{x}}{\sigma_j}\right)$

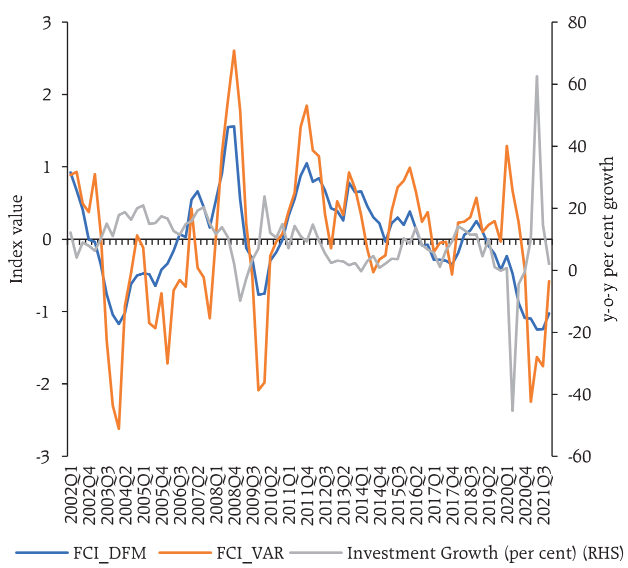
Chart 2: Accumulated impulse responses of Investment

Accumulated Response to Cholesky One S.D. (d.f. adjusted) Innovations – 2 S.E.



Source: Authors' calculations.

Chart 3: Financial Conditions Index



Sources: Authors' calculations; MOSPI.

IV. Transmission of Financial Conditions to Investment

(i) Data and Methodology

In the empirical exercise, GFCF growth is used as a dependent variable, while FCI and expected GDP growth (actual GDP growth 2 quarters ahead) are considered explanatory variables – these capture financial conditions and business sector's outlook for the economy /demand conditions respectively, that influence new investment in the economy. World GDP growth, Brent crude prices and annual deviation of rainfall from its long period average (LPA) are used as instrument variables. World GDP growth is an important driver of external demand and thereby influences investment activity of the corporate sector. Brent crude directly effects the profitability

Table 3: Details of Variables

Variable	Description	Source
FCI	Indices capture five variables, *viz.*, government securities (G-Sec) 10-year benchmark yield, corporate AAA bonds spread over G-Sec yields, Nifty 50 performance, repo rate and net foreign portfolio flows	Authors' estimates (Section 3)
GDP growth	Per cent growth in India's GDP at constant prices.	National Statistical Office (NSO), Government of India
World GDP growth	Per cent growth in real world output	WEO database, IMF
Brent crude oil price	US$ per barrel	Bloomberg
Deviation of rainfall from LPA	Deviation of southwest monsoon from its LPA.	India Meteorological Department (IMD), Government of India

of firms as well as investment sentiment. Monsoon in India is critical for prospects of agricultural activity and rural demand which in turn affects sales growth of private corporate. The quarterly data from 2002-03:Q1 to 2019-20:Q3 are used for estimation given the structural break in data during Covid-19 pandemic. Further details on variables are provided in Table 3.

Transmission of financial conditions to investment (GFCF) growth is ascertained by estimating the generalised method of moments (GMM) model to address endogeneity issues. Equation below provides the general specification of the model.

$$Y_t = \alpha + \beta_1 Y_{t-1} + \beta_2 X_t + \varepsilon_t$$

One lag of dependent variable (investment) as well as explanatory variables (FCI and control variables) are considered as instrument variables in GMM estimation.

To examine the asymmetric impact of financial conditions on investment growth, quantile regressions are used over the different points of distribution curve, following the methodology of Adrian *et al.* (2019). In the quantile regression specification, y_{t+h} is the annualised average growth rate of investment between t and $t+h$ and x_t is a vector containing the conditioning variables, including a constant. The regression slope, β_τ, is chosen to minimise the quantile weighted absolute value of errors:

$$\hat{\beta}_\tau = \arg\min_{\beta_\tau \in \mathbb{R}^k} \sum_{t=1}^{T-h} \left(\tau\, I_{(y_{t+h} \geq x_t\beta)} |y_{t+h} - x_t\beta_\tau| + (1-\tau)\, I_{(y_{t+h} < x_t\beta)} |y_{t+h} - x_t\beta_\tau|\right), \quad \text{...(1)}$$

where, $I_{(.)}$ denotes the indicator function. The predicted value from that regression is the quantile of y_{t+h} conditional on x_t,

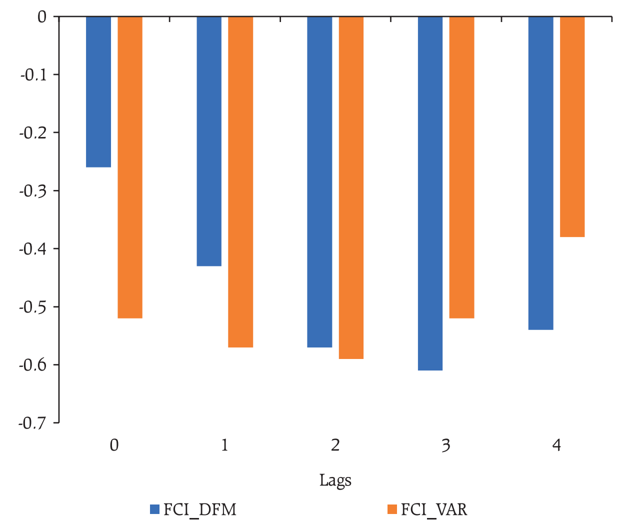
$$\hat{Q}_{y_{t+h|x_t}}(\tau|x_t) = x_t\hat{\beta}_\tau \quad \text{...(2)}$$

Koenker and Bassett (1978) show that $\hat{Q}_{y_{t+h|x_t}}(\tau|x_t)$ is a consistent linear estimator of the quantile function of y_{t+h} conditional on x_t. The quantile regression differs from an ordinary least squares (OLS) regression in two respects. First, the quantile regression minimises the sum of absolute errors, rather than the sum of squared errors. Second, it puts differential weights on the errors depending on whether an error term is above or below the quantile. Koenker *et al.* (2005) propose that quantile autoregression (QAR) models can deliver important insights about dynamics, *e.g.*, adjustment asymmetries in economic time series and thus, provides a useful tool in empirical diagnostic time series analysis. Adrian, *et al.* (2019) underline the importance of quantile regression to predict the entire distribution of GDP growth as study based on point forecast might not be able to capture the predictive power of financial indicators.

(ii) Empirical Results

To begin with, the correlation of FCI is checked with GFCF growth which is found to be negative, suggesting inverse association among both variables.

Chart 4: Correlation coefficient (GFCF growth and FCI)



Source: Authors' calculations.

Table 5: GMM Estimates
(Dependent variable: investment growth)

	(1)	(2)
Investment growth (-1)	0.60*** (4.03)	0.70*** (5.32)
FCI_DFM(-1)		-2.56*** (-2.95)
FCI_DFM(-2)	-2.61** (-2.17)	
GDP Growth (+2)	0.61*** (2.92)	0.46** (2.43)
Adjusted R^2	0.52	0.56
Prob (J-statistic)	0.66	0.60

All Q-statistics are highly insignificant suggesting no serial correlation left in the residuals.
***: Significant at less than 1 per cent level.
**: Significant at less than 5 per cent level.
*: Significant at less than 10 per cent level.
The equation is estimated through generalised method of moments approach with the following instruments: lags of the endogenous variables,lag of world GDP growth, Brent crude prices and annual deviation rainfall in India from its LPA.
Source: Authors' calculations.

The lagged FCI has a higher correlation coefficient with GFCF growth (Chart 4). Granger causality test provides evidence that FCI causes investment growth contemporaneously as well as with lags (Table 4).

Next, the results of the GMM model estimated with GFCF growth as dependent variable are furnished in Table 5 below. We consider FCI_DFM as explanatory variable as FCI_VAR suffers from endogeneity problem due to its construction. In alternative specifications of the model, FCI at first and second lags are statistically significant, which implies that financial conditions impact investment with a lag of 1-2 quarters. Expectations about future demand have been found playing a significant role in driving investment growth.

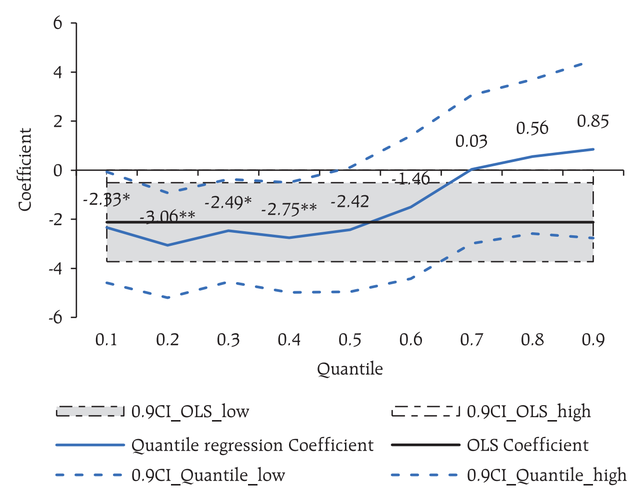
As alluded to earlier, we have also examined the asymmetric response of investment growth to financial conditions. Our results for quantile regressions suggest that any tightening of financial conditions during low investment growth phase

Table 4: Granger Causality Test

Hypothesis	FCI_DFM		FCI_VAR	
	F-statistic	Prob	F-statistic	Prob
FCI does not Granger cause GFCF growth	**3.21****	**0.019**	**3.11****	**0.022**
FCI (-1) does not Granger cause GCFC growth	**3.08****	**0.023**	1.28	0.287
FCI (-2) does not Granger cause GFCF growth	**4.20*****	**0.005**	**3.42****	**0.014**
FCI (-3) does not Granger cause GFCF growth	**2.74****	**0.037**	1.46	0.225
FCI (-4) does not Granger cause GFCF growth	1.87	0.129	1.19	0.32

Source: Authors' calculations.

Chart 5: Coefficient of FCI(-1)



***: Significant at less than 1 per cent level.
**: Significant at less than 5 per cent level.
*: Significant at less than 10 per cent level.
Source: Authors' calculations.

Table 6: Quantile regressions (dependent variable: GFCF growth)

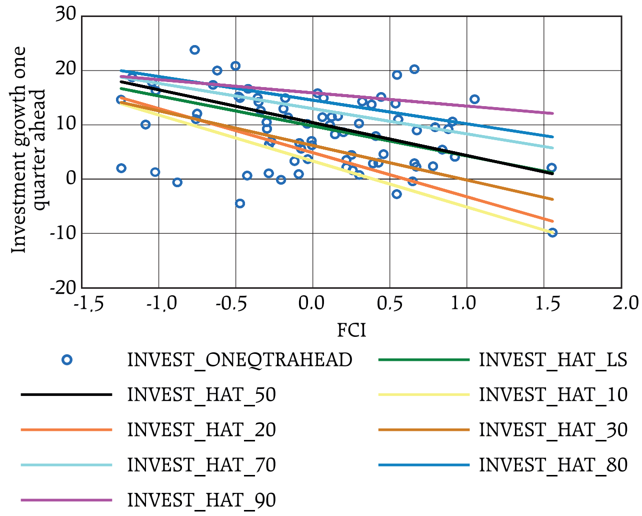
	(1) OLS	(2) Q10	(3) Q20	(4) Q30	(5) Q40
GFCF growth (-1)	0.89*** (0.000)	0.47*** (0.000)	0.65*** (0.000)	0.79*** (0.000)	0.81*** (0.000)
FCI (-1)	-2.12** (0.033)	-2.33* (0.096)	-3.06** (0.022)	-2.49** (0.053)	-2.75** (0.048)
	(6) Q50	**(7) Q60**	**(8) Q70**	**(9) Q80**	**(10) Q90**
GFCF growth (-1)	0.89*** (0.000)	0.95*** (0.000)	1.05*** (0.000)	1.19*** (0.000)	1.50*** (0.000)
FCI (-1)	-2.43 (0.119)	-1.47 (0.414)	0.03 (0.987)	0.56 (0.773)	0.85 (0.703)

Source: Authors' calculations.

puts future investment activity at risk (Chart 5 and table 6). The coefficient of FCI is negative and statistically significant up to 50th quantile which indicates that a tightening of financial conditions puts future investment growth at risk during low investment growth phase.

A scatter plot of one-quarter ahead investment growth against financial conditions is shown in Chart 6. It shows that the slope of univariate quantile regression lines differs significantly across quantiles and from the OLS regression line. The slope for lower quantiles is much steeper as compared to higher quantiles, suggesting asymmetric impact of financial conditions on investment growth.

Chart 6: Quantile Regressions (One quarter ahead Investment: FCI)

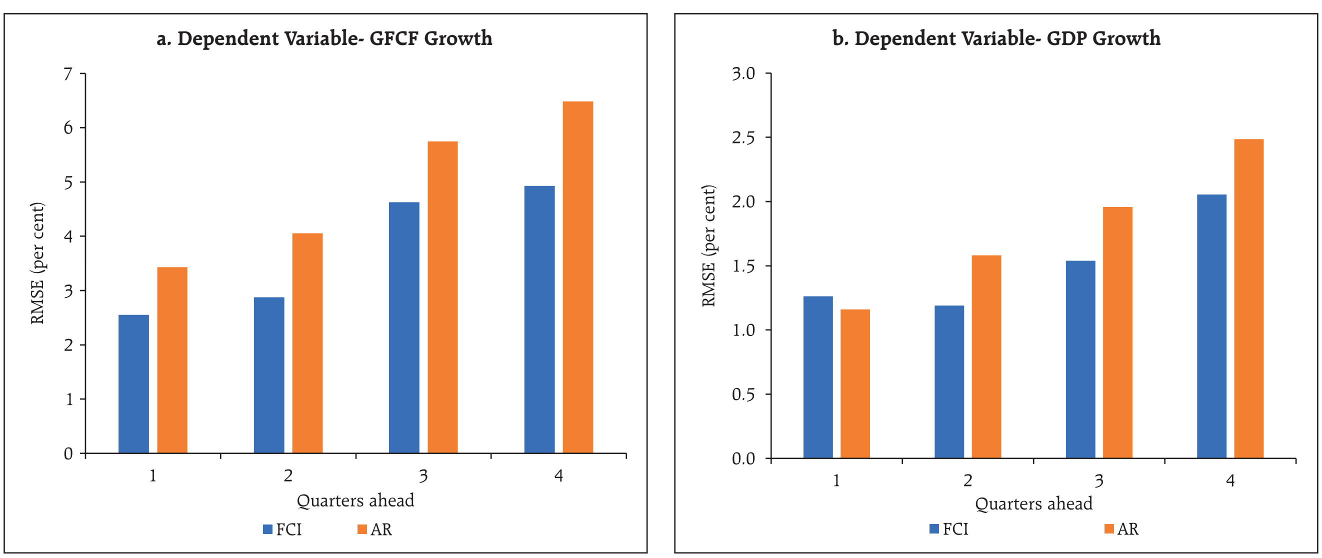


Source: Authors' calculations.

Financial Conditions for forecasting GDP and Investment

In order to assess the relative forecasting performance of FCIs, an autoregressive (AR) model

Chart 7: RMSE of FCI model and AR model



Source: Authors' calculations.

is augmented with lagged FCI to forecast GDP (FCI model) and GFCF growth and the forecasting error (RMSE) is compared with that of a simple AR model. Both models are estimated for the sample period 2002-03:Q1 to 2019-20:Q3 and a rolling window approach is applied to examine the out-of-sample forecasting performance for the horizon up to four quarters[4]. The analysis indicates that the inclusion of FCI improves the forecast performance as evidenced by a decline in RMSE for both investment growth and GDP growth (Chart 7).

V. Conclusion

This study examines the transmission of overall financial conditions to investment activity. Financial conditions are captured by FCIs following two different methodologies – a weighted-sum approach and a dynamic factor model (DFM). The empirical analysis indicates that financial conditions have a lagged impact on investment growth. Further, the impact is asymmetric with financial conditions having significant effect on investment during low growth phase (left tail of the distribution). The easy financial conditions have started reversing in the recent period. Improving domestic demand conditions are expected to aid domestic investment activity.

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[4] By restricting the estimation sample upto 2016-17, rolling window is created to calculate RMSE based on 7 iterations.

[5] According to RBI survey, capacity utilisation in the manufacturing sector in Q4:2021-22 was 75.3 per cent relative to its long-term average of 73.7 per cent

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Annexure

Table 1: ADF Unit Root Test Results

Variable	Test statistic
Investment growth	-3.29**
AAA spread over Gsec	-3.49***
G-Sec yield	-2.20**
Repo rate	-2.66***
FPI as per cent of GDP	-13.97***
NSE growth	-2.95***

***: Significant at less than 1 per cent level.

**: Significant at less than 5 per cent level.

*: Significant at less than 10 per cent level.

Table 2: Correlation with GFCF

(Sample 2001-02: Q1 to 2019-20: Q3)

Lag	0	1	2	3	4
FCI_DFM	**-0.30** ***	**-0.50** ***	**-0.60** ***	**-0.64** ***	**-0.57** ***
Call Money Rate	**-0.22** **	**-0.39** ***	**-0.52** ***	**-0.58** ***	**-0.58** ***
AAA 10-year Index	-0.18	**-0.34** ***	**-0.49** ***	**-0.57** ***	**-0.57** ***
Net FPI flows as per cent of GDP	0.04	0.11	0.11	**0.20** *	0.05
Nifty 50 performance	**0.55** ***	**0.61** ***	**0.57** ***	**0.50** ***	**0.34** ***
Exchange rate change	**0.64** ***	**0.65** ***	**0.58** ***	**0.47** ***	**0.31** ***
GSec Yield: Benchmark: 10 Years	-0.08	**-0.21** *	**-0.42** ***	**-0.55** ***	**-0.61** ***
US 10-year yield	**0.56** ***	**0.52** ***	**0.52** ***	**0.49** ***	**0.46** ***
S&P 500 performance	**0.27** ***	**0.25** ***	0.12	0.00	-0.15
Brent USD/Barrel	-0.12	**-0.24** ***	**-0.43** ***	**-0.55** ***	**-0.61** ***
Bank Credit Growth	**0.48** ***	**0.36** ***	**0.29** ***	**0.24** ***	**0.24** ***
Repo rate	-0.03	**-0.23** **	**-0.37** ***	**-0.44** ***	**-0.42** ***
91-day t-bill rate	**-0.21** *	**-0.37** ***	**-0.54** ***	**-0.61** ***	**-0.61** ***

***: Significant at less than 1 per cent level.

**: Significant at less than 5 per cent level.

*: Significant at less than 10 per cent level.