

Macroeconomic Transmission Channels and Outbound Cross-Border M&A: Evidence from India, China, and BRICS

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Abstract

Cross-border mergers and acquisitions (CBMAs) have become a key mode of international expansion for firms from emerging economies. While prior studies emphasize target-country determinants, limited attention has been given to the role of home-country macroeconomic conditions. This study examines the macroeconomic transmission channels influencing outbound CBMA activity in BRICS economies, with a focus on India and China. Using panel data from 2000–2020, the analysis employs panel ARDL (Pooled Mean Group) and country-specific ARDL models to evaluate growth, financial, and cost-related factors. The results reveal significant cross-country heterogeneity. In India, CBMA activity is driven primarily by financial factors such as domestic savings and foreign direct investment, while inflation exerts a negative effect. In contrast, China's CBMA activity is more strongly influenced by economic growth and cost conditions. Exchange rate effects are significant in both countries but differ in magnitude and direction. The Global Financial Crisis significantly reduced CBMA activity in India but had no significant impact in China. The findings highlight the importance of country-specific macroeconomic structures in shaping international expansion strategies.

Keywords

Cross-Border Mergers and Acquisitions; Macroeconomic Transmission Channels; BRICS Economies; India–China Comparison; Emerging Markets.

1. Introduction

Cross-border mergers and acquisitions (CBMAs) have become a primary method of foreign direct investment and worldwide company growth, especially in developing countries. In recent decades, a significant share of worldwide production and capital flows has been propelled by CBMAs, underscoring their strategic significance in market, technology, and resource access (Uddin & Boateng, 2011). Previous research has predominantly concentrated on firm-level and industry-specific variables; however, new studies highlight the increasing significance of macroeconomic conditions in influencing M&A activity and overseas investment decisions (Kumar et al., 2023). Specifically, macroeconomic factors in the home country, including GDP growth, liquidity, currency rates, and financial market conditions, substantially impact outbound CBMA activity by influencing enterprises' financial capabilities and strategic motivations (Boateng et al., 2014). Data from BRICS economies shows that liquidity, changes in currency rates, and new ideas are very important in deciding how much and where cross-border M&A

flows go (Vissa & Thenmozhi, 2022). Additionally, macroeconomic instability and unpredictability might affect the chances of M&A being completed and successful, which shows how important economic stability is for international growth.

Even with these improvements, the research is still not very good at explaining how multiple macroeconomic transmission channels work together to affect CBMA activity in different nations. The differences across rising economies, especially India and China, also point to the fact that macroeconomic consequences may be very different depending on the structures and institutions of each country (Xu, 2025).

The increasing significance of cross-border mergers and acquisitions (CBMAs) as a principal method of worldwide expansion highlights the necessity to comprehend their fundamental drivers, especially in emerging nations. CBMAs make it easier to get to strategic assets, technological capabilities, and global markets, which helps the economy thrive and makes countries more competitive on the world stage (Han et al., 2025). It is important for both policymakers and businesses to know what macroeconomic factors affect global investment flows since these flows are becoming more and more important.

The impetus for this analysis stems from the acknowledgement that the prevailing literature has predominantly focused on firm-level and host-country variables, while significantly overlooking the influence of home-country macroeconomic conditions. Although previous studies indicate that factors such as GDP, liquidity, exchange rates, and financial development significantly influence M&A activity, these elements are frequently analysed in isolation or as control variables instead of being considered within a cohesive transmission mechanism (Uddin & Boateng, 2011). Moreover, empirical data indicates that macroeconomic factors impact not just the volume of M&A activity but also deal outcomes, completion probabilities, and strategic decision-making in conditions of uncertainty (Kumar et al., 2023). This suggests the necessity for a more extensive framework that encompasses the dynamic and interrelated impacts of macroeconomic variables.

The primary issue examined in this study is the absence of a cohesive analytical framework that elucidates the interplay of home-country macroeconomic transmission channels—such as growth, financial conditions, cost factors, and capabilities—in influencing outbound Cross-Border Mergers and Acquisitions (CBMA) activity, especially in emerging economies like the BRICS nations. Furthermore, there is considerable variability within these economies, with nations such as India and China displaying unique macroeconomic frameworks and policy contexts, potentially resulting in varying effects on CBMA activity (Kumar et al., 2023). It is important to study cross-border mergers and acquisitions (CBMAs) in BRICS economies because these countries have become major sources of global outward investment, making up a large and growing share of world FDI outflows—from less than 10% in the early 2000s to almost 20–25% in recent years. China and India are especially important in BRICS since they have different but important roles in global capital flows. China has always been one of the top investors in the world. In the late 2010s, outward FDI flows were more than USD 130–150 billion per year, and the total outward FDI stock was more than USD 2.5 trillion. This is because the government supports businesses, people save a lot (over 40% of GDP), and the industrial sector is growing quickly. India's outward FDI flows, on the other hand, are lower, usually between USD 10 and 20 billion per year. However, they have become more dynamic thanks to private companies, financial liberalisation, and India's integration into global markets. India's gross savings rate (around 30% of GDP) and rising foreign direct investment (FDI) inflows (which reached over USD 80 billion a year) are also signs of its expanding financial strength. It is analytically significant to compare India and China as it illustrates two distinct development models: a state-driven, export-oriented system versus a market-oriented, service-led economy. This comparison facilitates a deeper comprehension of how varying macroeconomic structures and financial conditions influence CBMA activity in emerging economies.

1.1. Objective of the study

The primary objective of this study to examine the impact of home-country macroeconomic transmission channels on outbound cross-border mergers and acquisitions (CBMAs)—is grounded in the evolving understanding that international expansion decisions are not solely driven by firm-level or host-country factors, but are significantly shaped by domestic macroeconomic conditions. Existing literature highlights that variables such as liquidity, exchange rates, and innovation play a crucial role in influencing M&A activity by affecting firms' financial capacity, competitiveness, and strategic intent (Kumar et al., 2023). Moreover, macroeconomic stability and growth conditions determine the likelihood of deal completion and success, indicating that broader economic environments act as transmission mechanisms for international investment decisions (Xu, 2025). However, prior studies largely examine

these factors in isolation, lacking an integrated framework that captures their combined and dynamic effects. This gap is particularly relevant for emerging economies like BRICS, where institutional structures and macroeconomic dynamics vary significantly across countries, influencing outward M&A behavior differently (Du & Boateng, 2015). Therefore, a unified transmission channel approach incorporating growth, financial, cost, and capability dimensions is essential to provide a more comprehensive understanding of CBMA activity.

2. Literature Review

2.1. Growth Channel (Macroeconomic Growth and CBMAs)

Macroeconomic growth is a crucial factor influencing cross-border mergers and acquisitions (CBMAs), as it indicates the economic robustness and growth potential of companies in the home nation. Increased GDP growth improves corporate profitability and internal financial capabilities, therefore promoting foreign expansion via acquisitions. Research has consistently demonstrated that economic development favourably affects M&A activity by enhancing investment expectations and diminishing uncertainty (Kumar et al., 2023). In emerging economies, especially within BRICS, growth patterns significantly influence external investment strategies. Accelerated economic growth enhances corporate competitiveness and stimulates strategic asset-seeking activities in international markets. Vissa and Thenmozhi (2022) ascertain that macroeconomic prosperity correlates with business cycles, resulting in heightened M&A activity. Boateng et al. (2014) also emphasise that GDP growth substantially affects outbound CBMA flows by enhancing domestic economic circumstances.

The impact of growth is not consistent among countries. Variations in economic structure, policy context, and institutional frameworks result in disparate effects, especially between significant growing economies like India and China. These differences indicate that growth functions as a primary transmission mechanism while interacting with other macroeconomic factors to influence CBMA activity.

2.2. Financial Channel (Liquidity, Savings, and FDI)

The financial channel elucidates the influence of domestic financial conditions on facilitating cross-border mergers and acquisitions. Liquidity, savings, and capital accessibility are essential in assessing organisations' capacity to finance acquisitions. Empirical research indicates that liquidity is a primary catalyst for M&A activity, especially in emerging economies (Vissa & Thenmozhi, 2022). Increased liquidity alleviates funding limitations and bolsters enterprises' ability to pursue international expansion. Domestic savings signify the accessibility of internal capital that can be utilised for investment objectives. Foreign Direct Investment inflows further indicate financial openness and connectivity with global markets, enabling cross-border investment activities. Bhasin and Gupta (2017) illustrate that foreign direct investment (FDI) is intricately associated with macroeconomic variables, including GDP and exchange rates, signifying its extensive influence on economic development and investment dynamics. Boateng et al. (2014) also determine that financial variables, such as money availability and stock market development, strongly affect outbound CBMAs. Moreover, macroeconomic stability and financial development enhance investor trust and diminish transaction costs, thereby fostering M&A activity. The financial channel is a highly empirically substantiated method by which macroeconomic conditions affect CBMAs, especially in capital-constrained emerging nations.

2.3. Cost Channel (Inflation and Exchange Rate Dynamics)

The cost channel emphasises macroeconomic variables that influence the relative cost and viability of cross-border ventures, specifically inflation and exchange rates. Fluctuations in exchange rates significantly impact the appeal of foreign acquisitions by affecting relative asset valuations and purchasing power. Uddin and Boateng (2011) demonstrate that exchange rates substantially influence CBMA activities by modifying investment incentives and competitiveness. Conversely, inflation signifies macroeconomic stability and cost factors. Elevated inflation heightens uncertainty, diminishes real returns, and deters long-term investments, including cross-border acquisitions. Empirical data indicates that inflation adversely impacts M&A activity and deal results by heightening macroeconomic risk (Kumar et al., 2023).

Recent studies also highlight that macroeconomic volatility amplifies the impact of cost-related variables on investment decisions. Xu (2025) illustrates that economic uncertainty and volatility diminish the probability of M&A completion by amplifying value ambiguity and negotiation risks. In emerging countries, where exchange rate fluctuations and inflation volatility are comparatively elevated, the cost channel assumes significant importance. Variations in currency management and inflation dynamics between nations like India and China further exacerbate the disparate effects on CBMA activity.

2.4. Capability Channel (Innovation and Structural Factors)

The capabilities channel highlights the significance of innovation, institutional quality, and structural elements in influencing organisations' capacity to participate in cross-border mergers and acquisitions. Innovation signifies a nation's technological progress and intellectual foundation, which bolster corporate competitiveness and absorptive capacity. Empirical research demonstrates that innovation facilitates M&A activity by allowing enterprises to efficiently acquire and integrate foreign assets (Vissa & Thenmozhi, 2022). Beyond innovation, institutional and governance considerations significantly impact CBMA outcomes. Du and Boateng (2015) emphasise that domestic institutions and state ownership substantially influence enterprises' foreign expansion strategies and value generation. Robust institutional frameworks diminish transaction costs and augment enterprises' capacity to function in global markets. Additionally, strategic and policy-related elements, like bilateral investment treaties, enhance cross-border acquisitions by mitigating uncertainty and safeguarding investments (Han et al., 2025). Nonetheless, the empirical data on innovation is inconclusive, with certain research indicating that financial variables predominantly influence innovation in promoting CBMA activity, especially in emerging economies. Consequently, although the capability channel offers valuable insights into the structural determinants of CBMA, its empirical relevance fluctuates across different contexts and is frequently subordinate to financial and cost-related considerations.

The current study delineates several macroeconomic transmission channels—growth, financial, cost, and exchange rate factors—that affect CBMA activity. Nevertheless, the majority of research concentrate on variables within target countries or investigate individual nation contexts, resulting in minimal comparative analysis among rising economies. Furthermore, the interplay of various channels within a cohesive empirical framework is still inadequately examined. This work mitigates these deficiencies by employing a panel ARDL (PMG) methodology to elucidate both short-run and long-run dynamics among BRICS nations, while integrating country-specific ARDL models for India and China. This contribution to the literature emphasises the variety in macroeconomic transmission mechanisms, which carries significant implications for international company strategy and policy development.

3. Methodology

The study employs a panel data approach (2000–2020) for BRICS economies using the Panel ARDL (Pooled Mean Group - PMG) model to estimate long-run and short-run relationships. To capture country-specific heterogeneity, separate ARDL models for India and China are also applied. Unit root (LLC/IPS) and Kao cointegration tests are conducted to validate the ARDL framework.

Baseline Model

$$CBMA_{it} = \alpha + \beta_1 GDP_{it} + \beta_2 SAV_{it} + \beta_3 FDI_GDP_{it} + \beta_4 INF_{it} + \beta_5 EXR_{it} + \beta_6 INNOV_{it} + \varepsilon_{it}$$

where i represents firms and t represents time.

Comprehensive Hypothesis (H1):

Home-country macroeconomic transmission channels—comprising growth (GDP per capita growth), financial conditions (savings, and FDI), cost factors (inflation and exchange rate), and capability (innovation)—have a significant long-run impact on outbound cross-border mergers and acquisitions, with effects varying across emerging economies such as India and China.

4. Data collection

The research employs a balanced panel dataset for BRICS economies spanning 2000 to 2020, sourced from various credible secondary references. Data regarding outbound cross-border mergers and acquisitions (CBMAs), quantified by the annual deal count, are sourced from international M&A databases, including Refinitiv Eikon. Macroeconomic indicators, such as GDP per capita growth, gross savings as a percentage of GNI, inflation measured by the CPI, and FDI inflows as a percentage of GDP, are obtained from the World Bank's World Development Indicators. Exchange rate statistics are sourced from the International Monetary Fund (IMF) International Financial Statistics (IFS), whereas innovation is represented by R&D expenditure as a percentage of GDP, acquired from the World Bank and UNESCO Institute for Statistics. A dummy variable is created to represent the Global Financial Crisis (2008–2009). The information is meticulously cleaned and processed, including logarithmic transformation when necessary, to guarantee consistency and comparability within nations, thus establishing a solid foundation for panel ARDL estimation (Table 1).

Table 1. Description of Variables and Data Sources

<i>Variable</i>	<i>Symbol</i>	<i>Measurement</i>	<i>Theoretical Justification</i>	<i>Key Supporting Studies (Updated & Aligned)</i>
<i>Outbound CBMA Activity</i>	CBMA	Number of outbound cross-border M&A deals (log)	Captures firms' international expansion and strategic asset-seeking behavior under OLI and springboard theory	Erel et al. (2012); Ellis et al. (2017); Zhang et al. (2020)
<i>GDP per Capita Growth</i>	GDPG	Annual % growth rate	Reflects macroeconomic strength, profitability, and investment capacity (growth channel)	Kumar et al. (2023); Vissa & Thenmozhi (2022); Boateng et al. (2014)
<i>Gross Savings</i>	SAV	% of GNI	Indicates internal financial capacity and capital availability for overseas investment	Ramasamy et al. (2012); Bhasin & Gupta (2017); Boateng et al. (2014)
<i>FDI Inflows (% of GDP)</i>	FDI_GDP	Net FDI inflows / GDP	Proxy for financial openness and global integration	Bhasin & Gupta (2017); Kurul & Yalta (2017); Desai et al. (2005)
<i>Inflation (CPI)</i>	INF	Annual % CPI change	Represents macroeconomic instability and cost pressures (cost channel)	Kumar et al. (2023); Buchanan et al. (2012); Xu (2025)
<i>Exchange Rate</i>	EXR	LCU per USD / REER	Affects purchasing power and acquisition cost competitiveness	Uddin & Boateng (2011); Ibrahim & Raji (2018); Chen et al. (2016)
<i>Global Financial Crisis</i>	GFC	Dummy (2008–09 = 1)	Captures global shocks affecting liquidity and investment decisions	Alquist et al. (2013); Du & Boateng (2015); Bekaert et al. (2014)
<i>Innovation</i>	INNOV	R&D expenditure (% GDP)	Reflects technological capability and absorptive capacity (capability channel)	Vissa & Thenmozhi (2022); Luo & Tung (2018); Deng (2013); Xie et al. (2020)

5. Results & Discussion

5.1. Numerical Results

The mean value of CBMA (42.61) with a high standard deviation (48.73) indicates substantial dispersion in outbound acquisition activity, suggesting uneven internationalization across BRICS economies. GDP growth averages 5.12%, reflecting relatively strong macroeconomic performance, though the minimum value (-2.30) captures economic downturns such as crisis periods.

Table 2. Descriptive statistics

Variable	Mean	Median	Max	Min	Std. Dev.
CBMA	42.61	28.00	210.00	2.00	48.73
GDPG	5.12	5.40	10.60	-2.30	2.41
SAV	30.85	29.70	52.40	15.20	8.34
FDI_GDP	2.71	2.35	6.50	0.20	1.56
INF	5.94	5.10	13.80	0.90	3.12
EXR	32.41	18.75	82.90	1.20	29.66
INNOV	14523	8420	68900	320	18120

Gross savings exhibit a high mean (30.85%) and wide range (15.20–52.40), highlighting significant differences in domestic capital accumulation, particularly between India and China. FDI_GDP remains modest (mean = 2.71), indicating that external capital plays a supporting rather than dominant role. Inflation shows variability (mean = 5.94; max = 13.80), pointing to macroeconomic instability in certain economies, especially India. Exchange rate variability is extremely high (std. dev. = 29.66), confirming strong external sector fluctuations. Innovation displays the largest dispersion (std. dev. = 18120), indicating structural capability differences, with China significantly outperforming other BRICS nations (Table 2).

Table 3. Correlation Matrix

Variable	CBMA	GDPG	SAV	FDI_GDP	INF	EXR	INNOV
CBMA	1.000	0.344	0.629	0.077	-0.301	-0.198	0.739
GDPG	0.344	1.000	0.412	0.221	-0.285	-0.154	0.390
SAV	0.629	0.412	1.000	0.266	-0.338	-0.472	0.681
FDI_GDP	0.077	0.221	0.266	1.000	-0.102	-0.089	0.210
INF	-0.301	-0.285	-0.338	-0.102	1.000	0.401	-0.265
EXR	-0.198	-0.154	-0.472	-0.089	0.401	1.000	-0.350
INNOV	0.739	0.390	0.681	0.210	-0.265	-0.350	1.000

CBMA exhibits the strongest positive correlation with innovation ($r = 0.739$), followed by savings ($r = 0.629$), indicating that capability and financial resources are the primary drivers of outward investment. GDP growth shows a moderate positive relationship ($r = 0.344$), supporting the growth channel hypothesis. FDI_GDP has a weak correlation ($r = 0.077$), suggesting limited direct influence. Inflation is negatively associated with CBMA ($r = -0.301$), confirming that macroeconomic instability discourages cross-border expansion. Exchange rate also shows a weak negative relationship ($r = -0.198$), implying mixed cost effects. Overall, the correlation results provide preliminary support for H1, especially highlighting financial and capability channels (Table 3).

Table 4. VIF test & Multicollinearity Test

Variable	VIF
GDPG	2.14
SAV	3.28
FDI_GDP	1.67
INF	2.05
EXR	2.91
INNOV	3.76

All VIF values are well below the critical threshold of 5, with the highest value observed for innovation (3.76). This indicates no serious multicollinearity among explanatory variables, ensuring the reliability of coefficient estimates. The relatively moderate VIF for savings (3.28) and exchange rate (2.91) suggests some association but not to a problematic extent. Therefore, the model is econometrically robust and suitable for regression analysis (Table 4, Table 5).

Table 5. Panel Unit root Test

Variable	Level	First Difference	Stationarity
CBMA	Non-stationary	Stationary	I(1)
GDPG	Stationary	—	I(0)
SAV	Non-stationary	Stationary	I(1)
FDI_GDP	Stationary	—	I(0)
INF	Stationary	—	I(0)
EXR	Non-stationary	Stationary	I(1)
INNOV	Non-stationary	Stationary	I(1)

The results indicate a mixed order of integration, with CBMA, savings, exchange rate, and innovation being integrated at I(1), while GDP growth, FDI_GDP, and inflation are stationary at I(0). This combination of I(0) and I(1) variables validates the use of the Panel ARDL approach, which is specifically designed for such cases. Importantly, none of the variables are integrated at I(2), ensuring model suitability.

Cointegration Test (Kao Test)

Test Statistic Prob.

ADF -3.842 0.0001

The Kao ADF statistic (-3.842) is significant at the 1% level ($p = 0.0001$), strongly rejecting the null hypothesis of no cointegration. This confirms the existence of a long-run equilibrium relationship between CBMA and macroeconomic variables, supporting the theoretical framework of macroeconomic transmission channels (Table 6).

Table 6. Panel ARDL Long-Run Results

Variable	Coefficient	Std. Error	t-Stat	Prob.
GDPG	0.842	0.214	3.93	0.000
SAV	1.276	0.331	3.85	0.000
FDI_GDP	0.318	0.142	2.24	0.026
INF	-0.559	0.188	-2.97	0.003
EXR	0.221	0.097	2.27	0.024
INNOV	0.0048	0.0012	4.00	0.000

All key variables are statistically significant in the long run. GDP growth ($\beta = 0.842$, $p < 0.01$) positively influences CBMA, confirming the growth-driven expansion hypothesis. Savings has the largest coefficient ($\beta = 1.276$), indicating that domestic financial resources are the strongest driver of outward M&A activity. FDI_GDP is positive and significant ($\beta = 0.318$), suggesting a complementary financial role. Inflation negatively affects CBMA ($\beta = -0.559$, $p < 0.01$), supporting the cost channel hypothesis. Exchange rate is positive ($\beta = 0.221$), indicating that depreciation may enhance outward investment competitiveness. Innovation is highly significant ($\beta = 0.0048$), reinforcing the capability-driven internationalization argument.

Error Correction Term

Coefficient Std. Error Prob.

-0.61 0.09 0.000

The error correction term is negative and highly significant (-0.61 , $p < 0.01$), indicating that approximately 61% of short-run deviations are corrected within one period. This confirms strong adjustment dynamics and validates the existence of a stable long-run equilibrium relationship (Table 7).

Table 7. Short-Run Results

Variable	Coefficient	Prob.
Δ GDPG	0.214	0.041
Δ SAV	0.398	0.012
Δ FDI_GDP	0.102	0.089
Δ INF	-0.221	0.034
Δ EXR	0.075	0.067
Δ INNOV	0.0021	0.018

In the short run, savings (0.398, $p = 0.012$) and GDP growth (0.214, $p = 0.041$) remain significant drivers of CBMA. Inflation continues to exert a negative effect (-0.221 , $p = 0.034$), indicating immediate sensitivity to cost conditions. Innovation also shows a positive short-run impact (0.0021, $p = 0.018$). However, FDI_GDP and exchange rate are only marginally significant, suggesting that their effects materialize more strongly in the long run (Table 8).

Table 8. Long-Run ARDL Results (India)

Variable	Coefficient	Std. Error	t-Stat	Prob.
GDPG	0.311	0.182	1.71	0.089
SAV	1.482	0.365	4.06	0.000
FDI_GDP	0.521	0.207	2.51	0.012
INF	-0.731	0.221	-3.30	0.001
EXR	-0.284	0.139	-2.04	0.043
INNOV	0.0029	0.0012	2.41	0.021

The results reveal that gross savings is the most dominant determinant of outbound CBMA activity in India, with a large and highly significant coefficient ($\beta = 1.482$, $p < 0.01$). This indicates that a 1% increase in savings leads to a 1.48% increase in outbound M&A activity, highlighting strong dependence on domestic financial resources. Similarly, FDI_GDP ($\beta = 0.521$, $p = 0.012$) positively influences CBMAs, suggesting that external capital inflows complement domestic savings in financing international expansion.

Inflation exhibits a significant negative impact ($\beta = -0.731$, $p = 0.001$), indicating that macroeconomic instability substantially reduces firms' ability to invest abroad. Exchange rate also shows a negative effect ($\beta = -0.284$, $p = 0.043$), implying that currency depreciation increases the cost of foreign acquisitions for Indian firms.

Innovation has a positive and significant coefficient ($\beta = 0.0029$, $p = 0.021$), though its magnitude is relatively small, suggesting that India's CBMA strategy is less capability-driven and more financially constrained. GDP growth is only weakly significant ($\beta = 0.311$, $p = 0.089$), indicating that economic growth plays a limited role compared to financial variables.

Table 9. Short-Run Dynamics (India)

Variable	Coefficient	Prob.
Δ GDPG	0.142	0.098
Δ SAV	0.421	0.010
Δ FDI_GDP	0.188	0.045
Δ INF	-0.298	0.021
Δ EXR	-0.116	0.072
Δ INNOV	0.0015	0.039

In the short run, savings remains significant (0.421, $p = 0.010$), reinforcing its role as the primary driver of CBMA activity even in the immediate period. FDI_GDP also shows a positive and significant effect (0.188, $p = 0.045$), indicating that capital inflows quickly translate into outward investment (Table 9).

Inflation continues to exert a negative effect (-0.298 , $p = 0.021$), demonstrating that Indian firms are highly sensitive to cost instability in both short and long run. Exchange rate remains weakly negative and marginally significant ($p = 0.072$), suggesting short-term exchange rate fluctuations have a limited but noticeable impact.

GDP growth is not strongly significant in the short run, confirming that India's CBMA activity is not primarily growth-driven but financially driven.

Error Correction Term (India)

Coefficient Std. Error Prob.

-0.67 0.11 0.000

The error correction term is negative and highly significant (-0.67 , $p < 0.01$), indicating that 67% of disequilibrium is corrected within one year. This reflects a fast adjustment speed, suggesting that Indian firms quickly realign their international investment decisions following short-term shocks.

GFC Impact (India)

Variable Coefficient Prob.

GFC Dummy -0.842 0.002

The Global Financial Crisis has a significant negative effect ($\beta = -0.842$, $p = 0.002$), indicating a sharp contraction in outbound CBMA activity. This confirms that India's international expansion is highly sensitive to global financial shocks, primarily due to financial constraints and external dependency (Table 10).

CN China. ARDL Results

Table 10. Long-Run ARDL Results (China)

Variable	Coefficient	Std. Error	t-Stat	Prob.
GDPG	1.264	0.298	4.24	0.000
SAV	0.842	0.391	2.15	0.032
FDI_GDP	0.205	0.113	1.81	0.071
INF	-0.118	0.094	-1.25	0.210
EXR	0.398	0.156	2.55	0.011
INNOV	0.0061	0.0015	4.07	0.000

GDP growth emerges as the strongest determinant of CBMA activity in China ($\beta = 1.264$, $p < 0.01$), indicating that a 1% increase in growth leads to a 1.26% rise in outbound M&A activity. Innovation also plays a crucial role ($\beta = 0.0061$, $p < 0.01$), with a larger magnitude than India, confirming that China's outward expansion is capability-driven. Exchange rate has a positive and significant effect ($\beta = 0.398$, $p = 0.011$), suggesting that currency management enhances global acquisition competitiveness. Savings also contributes positively ($\beta = 0.842$, $p = 0.032$), though its effect is smaller compared to India. FDI_GDP is only weakly significant ($p = 0.071$), indicating a limited role of external capital. Inflation is insignificant ($p = 0.210$), reflecting macroeconomic stability and effective policy control in China (Table 11).

Table 11. Short-Run Dynamics (China)

Variable	Coefficient	Prob.
Δ GDPG	0.398	0.012
Δ SAV	0.221	0.063
Δ FDI_GDP	0.087	0.112
Δ INF	-0.054	0.310
Δ EXR	0.142	0.048
Δ INNOV	0.0032	0.009

In the short run, GDP growth remains strongly significant (0.398, $p = 0.012$), confirming its immediate impact on CBMA activity. Innovation also shows a significant effect (0.0032, $p = 0.009$), indicating rapid translation of technological capability into international expansion. Exchange rate is positive and significant (0.142, $p = 0.048$), reinforcing the importance of cost competitiveness. Savings and FDI_GDP are only marginally significant, while inflation remains insignificant, further supporting the argument that China operates under stable macroeconomic conditions.

Error Correction Term (China)

Coefficient Std. Error Prob.

-0.54 0.08 0.000

The error correction term (-0.54 , $p < 0.01$) indicates that 54% of disequilibrium is corrected annually, suggesting a stable but slightly slower adjustment process compared to India. This reflects a more gradual and structured investment strategy.

GFC Impact (China)

Variable Coefficient Prob.

GFC Dummy -0.104 0.318

The GFC dummy is statistically insignificant ($p = 0.318$), indicating that China's CBMA activity was not adversely affected by the global financial crisis. This suggests strong institutional support and financial resilience. The country-specific results clearly demonstrate structural divergence in macroeconomic transmission channels. India's CBMA activity is financially driven and vulnerable to macroeconomic instability, as evidenced by strong coefficients for savings (1.482) and inflation (-0.731). In contrast, China's CBMA activity is growth- and innovation-driven, with dominant effects from GDP growth (1.264) and innovation (0.0061), alongside stable macroeconomic conditions. These findings strongly validate H1 and emphasize the importance of country-specific macroeconomic structures in shaping international expansion strategies.

5.2. Model Validation and Robustness Checks

A variety of diagnostic and robustness tests were done to ensure the reliability and consistency of the estimated Panel ARDL (PMG) and country-specific ARDL models. The absence of multicollinearity is validated by VIF values between 1.67 and 3.76, much below the crucial threshold of 5, which suggests stable coefficient estimations (Hair et al., 2014). Secondly, the unit root tests indicate a heterogeneous order of integration, so validating the application of the ARDL framework, which is resilient to variables integrated at $I(0)$ and $I(1)$ (Pesaran et al., 2001). The Kao cointegration test substantiates a long-term equilibrium relationship ($ADF = -3.842$, $p < 0.01$), reinforcing the theoretical connection between macroeconomic conditions and CBMA activity. The error correction terms for India (-0.67) and China (-0.54) are both negative and statistically significant, affirming the stability of the long-term connection and suggesting a swift adjustment to equilibrium (Narayan & Smyth, 2006). The alignment between short-run and long-run coefficients enhances the internal validity of the model.

The robustness is additionally reinforced by the congruence of findings with previous empirical research, especially regarding the beneficial impact of financial growth and innovation on promoting outbound FDI and M&A activities (Buckley et al., 2016; Ramasamy et al., 2012; Luo et al., 2010). The minimal influence of inflation in China and its pronounced adverse effect in India further substantiate current findings about macroeconomic stability disparities among emerging economies (Kang & Jiang, 2012; Deng, 2013) (Table 12).

Table 12. System GMM Estimation Results (with Significance Levels)

Variable	Coefficient	Std. Error	t-Stat	Significance
CBMA(-1)	0.487	0.079	6.16	***
GDPG	0.563	0.186	3.03	***
SAV	1.102	0.298	3.70	***
FDI GDP	0.267	0.121	2.20	**
INF	-0.441	0.169	-2.61	***
EXR	0.176	0.082	2.15	**
INNOV	0.0036	0.0010	3.60	***

Notes:

- *** = Significant at 1% level (99% confidence)
- ** = Significant at 5% level (95% confidence)
- * = Significant at 10% level (90% confidence)

Test	Statistic	Prob.	Interpretation
AR(1)	-3.08	0.002	Expected (first-order correlation present)
AR(2)	-1.12	0.262	No second-order autocorrelation
Hansen Test	0.73	0.412	Instruments valid
No. of Instruments	18	—	Within acceptable range

The System GMM results corroborate the Panel ARDL findings, confirming robustness after addressing endogeneity. The lagged dependent variable is positive and significant ($\beta = 0.487$, $p < 0.01$), indicating persistence in CBMA

activity. Gross savings remains the strongest determinant ($\beta = 1.102$, $p < 0.01$), followed by GDP growth ($\beta = 0.563$, $p < 0.01$) and FDI_GDP ($\beta = 0.267$, $p < 0.05$), highlighting the importance of financial and growth channels. Inflation exerts a negative effect ($\beta = -0.441$, $p < 0.05$), while exchange rate ($\beta = 0.176$, $p < 0.05$) and innovation ($\beta = 0.0036$, $p < 0.01$) positively influence CBMA activity. Diagnostic tests confirm model validity, with no second-order autocorrelation (AR(2), $p = 0.262$) and valid instruments (Hansen, $p = 0.412$), indicating that the results are robust and not driven by endogeneity.

5.3. Proposed Improvements and Future Research Directions

Despite providing significant insights, the study offers scope for several improvements.

First, future research can incorporate firm-level heterogeneity, such as ownership structure, corporate governance, and firm productivity, which have been shown to influence outward M&A decisions (Helpman et al., 2004; Bhaumik et al., 2010).

Second, the inclusion of institutional quality indicators—such as governance effectiveness, regulatory quality, and political stability—would provide a more comprehensive understanding of macroeconomic transmission channels (Globerman & Shapiro, 2003; Grosse & Trevino, 2005).

Third, the current study focuses on BRICS economies; however, extending the analysis to other emerging markets (e.g., ASEAN, Latin America) would improve generalizability and allow for broader comparative insights (UNCTAD, 2023).

Fourth, the model could be enhanced by incorporating non-linear effects and threshold models, particularly for variables like exchange rate and inflation, which may exhibit asymmetric impacts (Shin et al., 2014).

Fifth, while FDI_GDP captures financial openness, future studies may consider alternative financial indicators such as capital market development, credit availability, and interest rate differentials to better capture financial conditions (Alfaro et al., 2014). Additionally, the use of dynamic panel techniques such as System GMM could address potential endogeneity concerns (Arellano & Bover, 1995; Blundell & Bond, 1998). Finally, incorporating geopolitical risk and global uncertainty indices would enhance the explanatory power of the model, especially in the post-globalization era (Baker et al., 2016).

We acknowledge that firm-level characteristics such as ownership structure, firm size, managerial capability, and strategic intent can play an important role in shaping cross-border M&A decisions. However, the **primary objective** of this study is to examine the influence of **home-country macroeconomic transmission channels** on outbound CBMA activity at the aggregate level. Accordingly, the analysis is conducted using country-level panel data to capture broader macroeconomic conditions that affect international expansion. While firm-level heterogeneity is undoubtedly important, incorporating such variables would require firm-level datasets, which are beyond the scope of the present study.

To address this concern, we have explicitly acknowledged this limitation in the revised manuscript and highlighted it as a potential avenue for future research. Future studies may integrate firm-level and macro-level variables to provide a more comprehensive understanding of CBMA behavior.

6. Conclusion and Policy Implications

This study analysed the influence of home-country macroeconomic transmission mechanisms on outbound cross-border mergers and acquisitions (CBMAs) in BRICS nations, particularly India and China, from 2000 to 2020, employing Panel ARDL (PMG) and country-specific ARDL models. The results offer robust empirical validation for H1, affirming that growth, financial, cost, and competence channels strongly affect outward CBMA activity, though with considerable cross-country variability. The findings indicate that India's CBMA activity is mostly influenced by financial elements, notably gross savings ($\beta = 1.482$) and FDI_GDP ($\beta = 0.521$), whereas inflation ($\beta = -0.731$) considerably restricts international growth. This signifies that Indian companies are significantly reliant on domestic financial resources and are susceptible to macroeconomic instability. The substantial adverse effects of the Global Financial Crisis underscore the vulnerability of India's foreign investments to external disturbances. Conversely, China's CBMA activity is primarily propelled by economic growth ($\beta = 1.264$) and innovation ($\beta = 0.0061$), indicating a capability-oriented and strategically coordinated expansion model. The minimal impact of inflation and the resilience demonstrated during the Global Financial Crisis underscore China's macroeconomic stability and

institutional robustness. The findings align with the springboard approach, which posits that enterprises from emerging markets utilise international growth as a strategic mechanism to get resources and competencies (Luo & Tung, 2007; Deng, 2013). The findings correspond with the institutional theory of international business, emphasising the influence of home-country factors on corporate behaviour (North, 1990; Peng et al., 2008).

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