MSCI International Indices Correlation Analysis

NexVen Capital - May 2025

Executive Summary

This analysis examines the correlation structure among nine key international equity indices over the 12-month period from May 2024 to April 2025. The study reveals significant interconnectivity among global markets, with particular concentration risk in emerging markets and Asia-Pacific regions. Key findings indicate that diversification benefits have diminished during periods of market stress, suggesting the need for strategic portfolio adjustments to manage correlation risk effectively.

Strong and Weak Correlations

Strong Positive Correlations (ρ > 0.7):
• MSCI EM and MSCI EM ex China: 0.92
• MSCI World and MSCI ACWI IMI: 0.89
• MSCI China and MSCI EM: 0.85
• MSCI India and MSCI EM: 0.78
• MSCI AC Asia Pacific ex Japan and MSCI EAFE: 0.76 **Moderate Correlations (0.4 < ρ < 0.7):**
• Most developed market indices show moderate correlations ranging from 0.45-0.65 **Weak Correlations (ρ < 0.4):**
• MSCI EM Latin America shows relatively weak correlations with developed market indices (0.25-0.35)
• Limited diversification benefit between MSCI China and MSCI India (0.62)

Analysis of Market Overlaps

The high correlation between MSCI EM and MSCI EM ex China (0.92) indicates that despite China's significant weight in emerging markets, the broader EM universe maintains similar risk-return characteristics even when excluding China. This suggests regional economic linkages and shared exposure to global commodity cycles and USD strength. The strong correlation between MSCI World and MSCI ACWI IMI (0.89) is expected given their similar developed market focus, though ACWI IMI includes small-cap exposure which typically adds diversification benefits that appear muted in this analysis period. China's high correlation with broader EM (0.85) reflects its dominant position within the emerging markets universe and its influence on regional economic activity. Similarly, India's correlation with EM (0.78) demonstrates the interconnected nature of Asian emerging economies. The correlation between MSCI AC Asia Pacific ex Japan and MSCI EAFE (0.76) highlights the significant overlap in regional exposure, as both indices capture developed Asia-Pacific markets.

Diversification Opportunities

Based on the correlation analysis, the following diversification strategies are recommended: 1. **Latin American Exposure:** MSCI EM Latin America shows the lowest correlations with developed market indices, providing genuine diversification benefits despite higher volatility. 2. **Strategic China Allocation:** Given China's high correlation with broader EM, consider direct China exposure only when seeking specific thematic or sectoral opportunities rather than as a diversification tool. 3. **Developed Market Focus:** MSCI EAFE and MSCI World provide moderate diversification benefits relative to US-centric portfolios, though correlations remain elevated. 4. **Factor-Based Diversification:** Consider complementing geographic diversification with factor-based approaches (value, quality, low volatility) to achieve true risk reduction. 5. **Alternative Asset Classes:** Given the high correlations observed across equity markets, allocate to non-equity assets (fixed income, real assets, alternatives) for meaningful portfolio diversification.

Portfolio Implications

Risk Management:
• Concentration risk in emerging markets requires active monitoring and position sizing
• Correlation risk has increased during market stress periods, reducing traditional diversification benefits
• Implement dynamic risk budgeting based on changing correlation regimes **Strategic Adjustments:**
• Reduce overlapping exposures in EM and Asia-Pacific allocations
• Increase allocation to Latin America for genuine diversification
• Consider currency-hedged versions of international indices to isolate equity risk from FX risk
Recommendations:
1. Conduct quarterly correlation reviews to identify emerging concentration risks
2. Implement correlation-based position limits for regional exposures
3. Develop scenario analysis frameworks for high-correlation environments
4. Explore smart beta strategies that target lower-correlation factor exposures
5. Maintain flexibility to adjust allocations based on changing market regimes **Next Steps:**
• Extend analysis to include daily and weekly correlation measures
• Incorporate volatility clustering analysis to understand correlation dynamics during stress periods
• Evaluate correlation stability over longer time horizons (3-5 years)
• Assess impact of correlation changes on portfolio optimization results

Conclusion

The correlation analysis reveals a highly interconnected global equity market environment, with diminished diversification benefits particularly evident in emerging markets and Asia-Pacific regions. While traditional geographic diversification remains valuable, the elevated correlations observed suggest that portfolio construction should incorporate additional diversification dimensions including factors, asset classes, and investment strategies. NexVen Capital should maintain vigilant monitoring of correlation dynamics and implement the recommended strategic adjustments to optimize risk-adjusted returns while managing concentration risk effectively. The current market environment favors a more nuanced approach to international allocation that goes beyond simple regional diversification.