Exposé: Revisiting Momentum in FX Markets: A Post-2009 Empirical Study

1. Motivation

The currency momentum effect, established most notably by Menkhoff et al. (2012), has become a central empirical finding in the literature on FX anomalies. However, their analysis ends in 2009, just before structural shifts such as zero interest rates, unconventional monetary policy, and algorithmic trading fundamentally altered FX market dynamics. Despite the academic relevance of these changes, little research has assessed whether currency momentum persists under post-crisis conditions using a directly comparable methodology. This thesis addresses that gap by replicating the original results and extending the analysis to 2009–2025, contributing to the empirical understanding of pricing patterns and anomaly persistence in modern currency markets.

2. Research Objective and Question

This thesis is structured in two empirical phases:

1. **Replication**: To reproduce the core results of Menkhoff et al. (2012) for the period 1976–2009 using the original methodology. This step serves as a technical and conceptual foundation, ensuring that the analytical approach is sound and consistent with prior research.
2. **Extension**: To apply the same methodology to the period **2009–2025**, assessing whether momentum strategies continue to yield excess returns and whether their risk-return profiles remain stable or have undergone structural shifts.

Main research question:

"Does the currency momentum effect persist in the post-2009 period, and does it continue to represent a meaningful and robust trading strategy in modern FX markets?"

3. Methodology

The empirical analysis will be conducted using the statistical programming language **R**, which allows for reproducible, efficient, and flexible portfolio construction and performance evaluation.

Data:

- Monthly FX spot rates, forward rates (if available), and short-term interest rates
- Source: **Refinitiv Datastream**
- Sample: Up to **48 currencies**, as in Menkhoff et al. (2012), with a flexible cross-section based on data availability

Step 1 – Replication:

- Reproduce the momentum strategy as defined in Menkhoff et al.:
    - Ranking currencies by past returns
    - Constructing 6 portfolios (low to high momentum)
    - Calculating high-minus-low (HML) returns
- Compute average returns, Sharpe ratios, and compare to original study results

Step 2 – Extension:

- Apply the same methodology to the **2009–2025 period**
- Examine:
    - Performance and risk characteristics of momentum portfolios
    - Comparison to earlier results
    - Possible changes in effectiveness over time
    - Interpretation in the context of recent literature

4. Structure of the Thesis (Preliminary Outline)

1. **Introduction**
    - Background and relevance
    - Research question and objectives
2. **Literature Review**
    - FX momentum strategies
    - UIP and anomalies in currency markets
    - Related studies: Menkhoff et al., Asness et al., Nucera et al.
3. **Data and Methodology**
    - Data sources and sample construction
    - Return calculation and portfolio formation
    - Description of replication and extension phases
4. **Empirical Results**
    - Replication of Menkhoff et al. (1976–2009)
    - Extended analysis (2009–2025)
    - Risk-return metrics, Sharpe ratios, robustness checks
5. **Discussion**
    - Persistence of momentum in modern FX markets
    - Comparison with existing theory and literature
    - Potential limitations and implications
6. **Conclusion**
    - Summary of key findings
    - Answer to research question
    - Directions for further research

5. Important Literature Sources (Preliminary)

Asness, C. S., Moskowitz, T. J., & Pedersen, L. H. (2013). Value and momentum everywhere. *The journal of finance*, *68*(3), 929-985.

Burnside, C., Eichenbaum, M., & Rebelo, S. (2011). Carry trade and momentum in currency markets. *Annu. Rev. Financ. Econ.*, *3*(1), 511-535.

Fama, E. F. (1984). Forward and spot exchange rates. *Journal of monetary economics*, *14*(3), 319-338.

Menkhoff, L., Sarno, L., Schmeling, M., & Schrimpf, A. (2012). Currency momentum strategies. *Journal of Financial Economics*, *106*(3), 660-684.

Moskowitz, T. J., Ooi, Y. H., & Pedersen, L. H. (2012). Time series momentum. *Journal of financial economics*, *104*(2), 228-250.

Nucera, F., Sarno, L., & Zinna, G. (2024). Currency risk premiums redux. *The Review of Financial Studies*, *37*(2), 356-408.