# Price response functions and spread impact in foreign exchange markets

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**Abstract** To be done

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## 1 Introduction

In foreign exchange markets, the research focuses mainly on volatility (buscar referencias) and ...

The paper is organized as follows: in Sect. ?? we present our data set of foreign exchange pairs and briefly describe the physical and trade time. We then analyze the definition of the response functions in Sect. ??, and compute them for the majors pairs. In Sect. 5 we show how the spread impact the values of the response functions. Our conclusions follows in Sect. 6.

#### 2 Data set

In this study, we analyze foreign exchange pairs from the foreign exchange market.

We selected the foreign exchange market because ...

# 3 Response functions

In Sect. 3.1 we establish the fundamental quantities used in the price response definitions. In Sect. 3.2 we describe the physical time scale and the trade time scale. We introduce the price response functions used in literature in Sect. 3.3.

## 3.1 Key concepts

- 3.2 Time definition
- 3.2.1 Trade time scale
- 3.2.2 Physical time scale
- 3.3 Response function definitions

# 4 Price response function implementations

In Sect. 4.1 we analyze the responses functions in trade time scale and in Sect. 4.2 we analyze the responses functions in physical time scale.

- 4.1 Response functions in trade time scale
- 4.2 Response functions in physical time scale
- 5 Spread impact in price response functions

### 6 Conclusion

### 7 Author contribution statement

TG proposed the research. JCHL developed the method of analysis. The idea to analyze the spread impact was due to JCHL. JCHL carried out the analysis. All the authors contributed equally to analyze the results and write the paper.

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Appendix A Foreign exchange pairs used to analyze the spread impact

References