Contents

Preface v
Acknowledgements vii

List of Tables xiii
List of Figures xv
List of Symbols xvii

I. Introduction 1
1. The Context 1
2. A Summary of the Dissertation 6
References 9

II. Core Inflation in the Euro Area: Evidence from the Structural VAR Approach 11
1. Introduction 12
2. The Structural VAR Approach to Estimating Core Inflation 14
2.1 The Idea 15
2.2 The Structural VAR Approach 17
2.3 Identification of the Shocks 18
3. The Data 19
3.1 Special Problems Concerning Euro Area Data 19
3.2 The Choice of Variables 20
3.3 The Data Sources and the Aggregation Procedure 21
3.4 The Data Properties 22
4. Empirical Results 22
4.1 VAR Specification 23
4.2 Impulse Response Analysis 23
4.3 Variance Decompositions 24
4.4 Historical Decompositions: Estimated Core Inflation 25
4.5 Robustness of the Results 29
5. Conclusions 30
References 32
Appendix
A. Tables 34
B. Data 35

III. Core Inflation in the Euro Area: An Application of the Generalized Dynamic Factor Model 37
1. Introduction 38
2. The GDFM Core Inflation Indicator 41
2.1 The Motivation 41
2.2 The Model 43
2.3 The Assumptions 44
2.4 The Estimation Procedure 45
2.5 The Indicator 47
3. The Empirical Results 48
3.1 The Data 48
3.2 The Determination of the Number of Dynamic Common Factors 50
3.3 Core Inflation in the Euro Area 52
3.4 Contribution of Different Groups of Variables on the Core Inflation Indicator 57
4. Conclusions 58
References 60
Appendix
A. Tables 62

IV. Pass-Through of External Shocks to Euro Area Inflation 63
1. Introduction 64
2. Theoretical Background 66
3. The Data and Their Properties 68
3.1 The Data Set 68
3.2 The Data Properties 69
4. The Baseline Model 70
4.1 Setup and Identification of the Baseline Model 70
4.2 The Empirical Results 72
4.2.1 Specification of the VAR Model 72
4.2.2 Impulse Response Functions 72
4.2.3 Variance Decompositions 79
4.2.4 Historical Decompositions 80
5. Robustness Analysis 83
5.1 Robustness Over Time 83
5.2 Robustness Over Different Identification Schemes 88
5.2.1 Robustness Across Different Orderings of the Variables 88
5.2.2 Robustness As Regards an Identification Scheme that Includes Both Short and Long-Run Restrictions 91
6. Conclusions 95
References 97
Appendix
A. Tables and Figures 101
B. Data 104