

# Note on the Database

clément carrier

22 juillet 2015

## 1 Database

In this file, I describe the database used, and explain in more details the transformation made before using them into our model. If not mentioned, variables are introduced for the 11 original members countries of the eurozone + Greece + Sweden + UK + Denmark.

All the variables in the folder /IMF, /ECB and /OECD contain .csv files corresponding to original (raw) database. We transform the variables thanks to the .R file called "transformation". Then we save subsets from the complete database according to the model that we want to estimate.

### 1.1 ECB

These are the variables from ECB data warehouse :

- HICP : ICP.M.COUNTRY.N.000000.4.INX
- Processed food exc. Alcohol and tobacco : ICP.M.COUNTRY.N.FDPXAT.4.INX
- Unprocessed food : ICP.M.COUNTRY.N.FOODUN.4.INX
- Indus good exc. Energy : ICP.M.COUNTRY.N.IGXE00.4.INX
- Energy : ICP.M.COUNTRY.N.NRGY00.4.INX
- Services : ICP.M.COUNTRY.N.SERV00.4.INX
- Unemployment : STS.M.COUNTRY.S.UNEH.RTT000.4.000
- EUR/USD exchange rate (nominal) : EXR.M.USD.EUR.SP00.A

These variables are in the folder Data/ECB and are raw variables directly loaded from the ECB database. These variables are transformed in the .R file called "traitementECB" located in the subfolder Data/ECB. (The transformation is described in the following table)

Two databases are saved in the subfolder Data/ECB, one in level, the other one differentiated one time :

- ecb.Rdata
- difecb.RData

In this file ("traitementECB.R"), I also transform the monthly frequency database into quarterly frequency in order to add variables to the quarterly database when not available in quarterly frequency. This file is saved in the subfolder /Data/Quarterly/ECB under the name "ecbq.RData"

### 1.2 IMF

These are the variables from IMF (IFS) :

- Commodity Prices, Crude Oil, Petroleum (World)
- London Interbank Offer Rate, 3-Month (US)
- M1 (Eurozone)
- M3 (Eurozone)
- Interest Rates, Monetary Policy-Related Interest Rate, FPOLM (Eurozone + US)

- Central Bank, Total Gross Assets (ECB + FED)
- Nominal Effective Exchange Rate, Consumer Price Index (Eurozone)
- Industrial Production

These variable are in the folder Data/IMF and are raw variable directly loaded from the IFS database. These variables are transformed in the .R file called "traitementIMF" located in the subfolder Data/IMF. (The transformation are describe in the following table)

Two databases are saved in the subfolder Data/IMF, one in level, the other one differentiated one time :

- imf.Rdata
- difimf.RData

In this file ("traitementIMF.R"), I also transform the monthly frequency database into quarterly frequency in order to add variable to the quarterly database when not available in quarterly frequency. This file is saved in the subfolder /Data/Quarterly/IMF under the name "imfq.RData"

### 1.3 OECD

These variable is in the folder /OECD and are raw variables directly loaded from the OECD database. These variables are transformed in the .R file called "traitementOECD" located in the subfolder Data/OECD. (The transformation are describe in the following table)

These are the variables from OECD :

- Short-term Interest rates (Monthly Monetary and Financial Statistics)
- Long-term Interest rates (Monthly Monetary and Financial Statistics)

In this file ("traitementOECD.R"), I also transform the monthly frequency database into quarterly frequency in order to add variable to the quarterly database when not available in quarterly frequency. This file is saved in the subfolder /Data/Quarterly/OECD under the name "oecdq.RData"

## 2 Recapitulation table

Database							
	Variable	Source	Country	Adjustment	Original	Frequency	Transformation
Price	HICP	ECB	by country	NSA/NWD	index	monthly	log
	Processed food exc. Alc & tob	ECB	by country	NSA/NWD	index	monthly	log
	Unprocessed food	ECB	by country	NSA/NWD	index	monthly	log
	Indus good exc. Energy	ECB	by country	NSA/NWD	index	monthly	log
	Energy	ECB	by country	NSA/NWD	index	monthly	log
	Services	ECB	by country	NSA/NWD	index	monthly	log
	Oil Price	IFS (IMF)	World	NSA	index	monthly	log
Economic Activity	Indus. Production	IFS (IMF)	by country	NSA	index	monthly	log
	Unemployment rate	ECB	by country	SA/NWD	%	monthly	/100
Interest rates	Short-term Interest rates	OECD	by country	NSA/NWD	annual %	monthly	/100
	Long-term Interest rates	OECD	by country	NSA/NWD	annual %	monthly	/100
	LIBOR 3 month	IFS (IMF)	US	NSA/NWD	annual %	monthly	/100
Monetary	M1	IFS (IMF)	EZ	NSA/NWD	EUR	monthly	log
	M3	IFS (IMF)	EZ	NSA/NWD	EUR	monthly	log
	Monetary Policy-Related Rate	IFS (IMF)	US/EZ	NSA/NWD	annual %	monthly	/100
	Central Bank Asset	IFS (IMF)	US/EZ	NSA/NWD	USD/EUR	monthly	log
Other	NEER	IFS (IMF)	EZ	NSA/NWD	index	monthly	log
	EUR/USD exchange rate	ECB	EZ	NSA/NWD	1 EUR = x USD	monthly	-