dynamics

Jane Doe

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Table of contents

Preface

This is a Quarto book.

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(flow variables).

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(, economic time series).
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import pandas as pd
import matplotlib.pyplot as plt

df_inc = pd.read_excel(r".\data\data.xlsx"
                      , sheet_name="RealDispIncM"
                      , skiprows=range(1,11)
                      , index_col=0)

rdi = df_inc["(DC)Real Disposable Income Index: Prev Month=100 (f1)"]
rdi = (1 + rdi/100)
rdi = rdi.cumprod()/rdi['1993-12-01']

plt.plot(rdi)
plt.title("                 , %  / ")
plt.show()
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Figure 2.1: A line plot on a polar axis

2.2.1

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2.2.2

(calendar component, calendar variations)
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2.2.5 : , ,
. t - , x_t, C_t, S_t, I_t T_t - ,
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$$x_t = C_t F(T_t, S_t, I_t)$$

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(calendar adjustment).
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2.2.3

(seasonal component, seasonal variations) ,
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, (seasonally adjusted).
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$F(\cdot)$ (2.1) . ,

$$F(T_t, S_t, I_t) = T_t \cdot S_t \cdot I_t$$

$$F(T_t, S_t, I_t) = T_t + S_t + I_t$$

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[10,11]).

2.2.4

(irregular component, irregular variations) , :
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(irregular), (random). , ,
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(smoothing) (., , [1215]). -
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(, BV4, - [7]).

2.2.6

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(, secular trend) (cycles) .
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31 (. 2.9,). . /

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(2) ([17])) , 1861
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(outliers), . . (
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2.3

(macroeconomic time series), . .
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2.7, , 2.8, 2.9, 2.10, . 2.11, 2.12.

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2.3.2

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(. 2.13,), . . . -
1996, 1997, 1998, 1999 2002 . “ ” , ,
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(benchmarking).
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“ ”, . 2.13, , . . (step problem).
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www.iet.ru 39 1995 . = 100

1995 . = 100

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[28]. , . .
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. www.iet.ru 51 711-
(business cycles). - (., , [2830]).
, - (phases of the cycle) -
(aggregate economic activity), 5 (reference series):
(revival) ; (expansion) , - (peak);
(recession) ; (depression) - ,
, - (trough). , , ,
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(turning points). - ( ),
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(chronology) .

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, (classical cycles). , -
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, (growth cy- cles). -
- (the deviation-from-trend approach). (“ ”, , ,
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(institutional traps) [40], - (., ,
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XX . www.iet.ru 62 , , . .
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- www.iet.ru 66 , . 4.64.9, ,
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moving seasonality [53]. - ,
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Yx Y, . . (5.2)

YttxxI= . , , (. 2.11,), [55]. . , , , 19821984 . , - www.iet.ru 80 , . - T . , , . , - - . - xT, - Tx ~

(5.3)

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