

```

λ100
*
*
*
λ100
excel('INSERTPATHTODATASET')data['year'] =
data['Cpc']forconsumptiondatadeldata['Cpc']data =
data.iloc[1 :
]data.set_index('year', inplace =
True, drop =
True)start_year =
1870end_year =
2015data =
data.loc[start_year :
end_year]; threshold =
0.095countries =
list(data.columns)years =
list(data.index)data_pct =
data.pct_change()cons_df =
data_pct
list =
[]
df_list =
[]
dict =
frame =
data_pct[country]
years =
len(subframe.dropna())
frame_less =
subframe.iloc[1 :
]
index =
subframe_less.loc[pd.isna(subframe_less)].index
counter =
0
container =
[]succession_year_container =
[]
yearandsubframe.loc[x] <
0andsubframe.loc[x+
1] <
0:
counter +=
1
counter ==
1:
list =
[subframe.loc[x], subframe.loc[x+
1]]empty_year_list =
[x, x+
1]
counter >
1:
list.append(subframe.loc[x+
1])empty_year_list.append(x+
1)
container.append(empty_list)succession_year_container.append(empty_year_list)
counter =
0
periods =
list(succession_year_containerforsuccession_year_container, i nitertools.groupby(succession_year_container))
contractions =
[]
containerforsuccession_container, i nitertools.groupby(succession_container)) :
contractions.append(sum(i))
check_list =
[]
contractions) :
dict =
dict['contraction'] =
iempty_dict['index'] =
idx
check_list.append(empty_dict)
df =
pd.DataFrame(empty_check_list)
periods =
[]
df['index'].values) :
periods.append(unique_periods[i])

```