MATLAB CODES

PART 3, SECTION-1

CONSUMPTION Vs YEAR

```
clear
clc
closeall
year = 1929:1:1933
Con = [593.9 562.1 544.9 496.1 484.8]
figure
holdon %This allows multiple plots to be drawn on the axes
plot(year,Con,'c-','LineWidth',3)
plot(year,Con,'k^','LineWidth',3,'MarkerSize',8)
xlabel('Year')
ylabel('Consumption (in billion $)')
gridon
title('Consumption vs Year')
legend('Consumption','Consumption(Data points)')
xticks([1929:1:1933])
year =
1929 1930 1931 1932 1933
Con =
593.9000 562.1000 544.9000 496.1000 484.8000
```

GDP Vs YEAR

```
clear
clc
closeall
year = 1929:1:1933
GDP = [790.9 719.7 674.0 584.3 577.3]
figure
holdon %This allows multiple plots to be drawn on the axes
plot(year,GDP,'r-','LineWidth',3)
plot(year,GDP,'k^','LineWidth',3,'MarkerSize',8)
xlabel('Year')
ylabel('GDP (in billion $)')
gridon
title('GDP vs Year')
legend('GDP','GDP(Data points)')
xticks([1929:1:1933])
year =
1929 1930 1931 1932 1933
GDP =
790.9000 719.7000 674.0000 584.3000 577.3000
```

GOVT. PURCHASE Vs YEAR

```
clear
clc
closeall
year = 1929:1:1933
gp = [105.4 116.2 121.2 117.1 112.8]
figure
holdon %This allows multiple plots to be drawn on the axes
plot(year,gp,'r-','LineWidth',2)
plot(year,gp,'k^','LineWidth',3,'MarkerSize',8)
xlabel('Year')
ylabel('Government purchases (in billion $)')
gridon
title('Government purchase vs Year')
lgd=legend('Government purchases','Government purchases(Data
points)','Location','NorthEast')
lgd.FontSize=4
xticks([1929:1:1933])
year =
1929 1930 1931 1932 1933
gp =
105.4000 116.2000 121.2000 117.1000 112.8000
lgd =
Legend (Government purchases, Government purchases(Dat…) with
properties:
String: {'Government purchases' 'Government purchases(Data
points)'}
Location: 'northeast'
Orientation: 'vertical'
FontSize: 9
Position: [0.3799 0.8210 0.5057 0.0797]
Units: 'normalized'
Use GET to show all properties
lgd =
Legend (Government purchases, Government purchases(Dat…) with
properties:
String: {'Government purchases' 'Government purchases(Data
points)'}
Location: 'northeast'
Orientation: 'vertical'
FontSize: 4
Position: [0.6095 0.8533 0.2761 0.0473]
Units: 'normalized'
Use GET to show all properties
```

INVESTMENT Vs YEAR

```matlab
clear
clc
close all
year = 1929:1:1933
Inv = [92.4 59.8 37.6 9.9 16.4]
figure
hold on %This allows multiple plots to be drawn on the axes
plot(year,Inv,'c-','LineWidth',3)
plot(year,Inv,'k^','LineWidth',3,'MarkerSize',8)
xlabel('Year')
ylabel('Investment purchases (in billion $)')
grid on
title('Investment vs Year')
legend('Investment purchases','Investment purchases(Data points)')
xticks([1929:1:1933])
year =
1929 1930 1931 1932 1933
Inv =
92.4000 59.8000 37.6000 9.9000 16.4000
```

MONEY SUPPLY M2 Vs YEAR

```matlab
clear
clc
close all
year = 1925:1:1933
ms = [42.2 43.7 44.7 46.4 46.8 45.7 36.1 32.2 31.1]
figure
hold on %This allows multiple plots to be drawn on the axes
plot(year,ms,'y-','LineWidth',3)
plot(year,ms,'k^','LineWidth',3,'MarkerSize',8)
xlabel('Year')
ylabel('Money supply M2 (in billion $)')
grid on
title('Money supply vs Year')
lgd=legend('Money supply','Money supply(Data points)','Location','NorthEast')
lgd.FontSize=4;
xticks([1925:1:1933])
set(gca,'Color','[0.8 0.8 0.8]');
year =
Columns 1 through 6
1925 1926 1927 1928 1929
```

MONEY SUPPLY M1 Vs YEAR

```matlab
clear
clc
close all
year = 1925:1:1933
ms = [27.4 27.8 27.9 28.4 26.6 25.8 24.1 21.1 19.9]
figure
hold on %This allows multiple plots to be drawn on the axes
plot(year,ms,'c-','LineWidth',3)
plot(year,ms,'k^','LineWidth',3,'MarkerSize',8)
xlabel('Year')
ylabel('Money supply M1 (in billion $)')
grid on
title('Money supply vs Year')
lgd=legend('Money supply','Money supply(Data
points)','Location','NorthEast')
lgd.FontSize=5;
xticks([1925:1:1933])
```
year =
Columns 1 through 6
1925 1926 1927 1928 1929
1930
Columns 7 through 9
1931 1932 1933
ms =
Columns 1 through 7
27.4000 27.8000 27.9000 28.4000 26.6000 25.8000 24.1000
Columns 8 through 9
21.1000 19.9000
lgd =
Legend (Money supply, Money supply(Data points)) with properties:
1
String: {'Money supply' 'Money supply(Data points)'}
Location: 'northeast'
Orientation: 'vertical'
FontSize: 9
Position: [0.4883 0.8210 0.3973 0.0797]
Units: 'normalized'

NOMINAL INTEREST RATE Vs YEAR

```
clear
clc
closeall
year = 1925:1:1933
ms = [27.4 27.8 27.9 28.4 26.6 25.8 24.1 21.1 19.9]
figure
holdon %This allows multiple plots to be drawn on the axes
plot(year,ms,'c-','LineWidth',3)
plot(year,ms,'k^','LineWidth',3,'MarkerSize',8)
xlabel('Year')
ylabel('Money supply M1 (in billion $)')
gridon
title('Money supply vs Year')
lgd=legend('Money supply','Money supply(Data
points)','Location','NorthEast')
lgd.FontSize=5;
xticks([1925:1:1933])
```
year =
Columns 1 through 6
1925 1926 1927 1928 1929
1930
Columns 7 through 9
1931 1932 1933
ms =
Columns 1 through 7
27.4000 27.8000 27.9000 28.4000 26.6000 25.8000 24.1000
Columns 8 through 9
21.1000 19.9000
lgd =
Legend (Money supply, Money supply(Data points)) with properties:
1
String: {'Money supply' 'Money supply(Data points)'}
Location: 'northeast'
Orientation: 'vertical'
FontSize: 9
Position: [0.4883 0.8210 0.3973 0.0797]
Units: 'normalized'
Use GET to show all properties

REAL INTEREST RATE Vs YEAR

```
clear
clc
closeall
year = 1925:1:1933
ms = [27.4 27.8 27.9 28.4 26.6 25.8 24.1 21.1 19.9]
figure
holdon %This allows multiple plots to be drawn on the axes
plot(year,ms,'c-','LineWidth',3)
plot(year,ms,'k^','LineWidth',3,'MarkerSize',8)
xlabel('Year')
ylabel('Money supply M1 (in billion $)')
gridon
title('Money supply vs Year')
lgd=legend('Money supply','Money supply(Data
points)','Location','NorthEast')
lgd.FontSize=5;
xticks([1925:1:1933])
```

year =
Columns 1 through 6
1925 1926 1927 1928 1929
1930
Columns 7 through 9
1931 1932 1933
ms =
Columns 1 through 7
27.4000 27.8000 27.9000 28.4000 26.6000 25.8000 24.1000
Columns 8 through 9
21.1000 19.9000
lgd =
Legend (Money supply, Money supply(Data points)) with properties:
1
String: {'Money supply' 'Money supply(Data points)'}
Location: 'northeast'
Orientation: 'vertical'
FontSize: 9
Position: [0.4883 0.8210 0.3973 0.0797]
Units: 'normalized'
Use GET to show all properties

PART- 3, SECTION -2

NORTH AMERICA

```
clear
clc
closeall
year = 1985:1:2016
covar = [2.21 2.46 3.50 3.96 3.86 1.76 1.96 1.94 1.85 1.90 1.70 1.82
2.00 2.10 1.86 2.00 1.78 2.05 1.90 1.75 1.60 1.62 2.43 4.23 3.25 1.66
1.94 1.96 2.15 1.82 1.96 2.15]
figure
holdon %This allows multiple plots to be drawn on the axes
plot(year,covar,'r-','LineWidth',3)
plot(year,covar,'k^','LineWidth',3,'MarkerSize',8)
xlabel('Year')
ylabel('#CoVaR')
gridon
title('NORTH AMERICA : #CoVaRvs Year')
xticks([1985:1:2016])
year =
Columns 1 through 6
1985 1986 1987 1988 1989
1990
Columns 7 through 12
1991 1992 1993 1994 1995
1996
Columns 13 through 18
1997 1998 1999 2000 2001
2002
Columns 19 through 24
2003 2004 2005 2006 2007
2008
Columns 25 through 30
2009 2010 2011 2012 2013
2014
Columns 31 through 32
2015 2016
covar =
Columns 1 through 7
2.2100 2.4600 3.5000 3.9600 3.8600 1.7600 1.9600
Columns 8 through 14
1.9400 1.8500 1.9000 1.7000 1.8200 2.0000 2.1000
Columns 15 through 21
1.8600 2.0000 1.7800 2.0500 1.9000 1.7500 1.6000
```

JAPAN

```
clear
clc
closeall
year = 1987:1:2017
covar = [3.85 4.00 6.22 6.00 5.85 4.20 3.46 2.70 3.90 3.50 4.10 3.65
4.02 4.00 2.98 2.84 4.21 3.15 3.40 3.45 4.36 7.64 3.90 3.95 3.20 2.96
5.62 4.10 3.90 5.46 4.22]
figure
holdon %This allows multiple plots to be drawn on the axes
plot(year,covar,'g-','LineWidth',3)
plot(year,covar,'k^','LineWidth',3,'MarkerSize',8)
xlabel('Year')
ylabel('#CoVaR')
gridon
title('JAPAN : #CoVaRvs Year')
xticks([1987:1:2017])
```
year =
Columns 1 through 6
1987 1988 1989 1990 1991
1992
Columns 7 through 12
1993 1994 1995 1996 1997
1998
Columns 13 through 18
1999 2000 2001 2002 2003
2004
Columns 19 through 24
2005 2006 2007 2008 2009
2010
Columns 25 through 30
2011 2012 2013 2014 2015
2016
Column 31
2017
covar =
Columns 1 through 7
3.8500 4.0000 6.2200 6.0000 5.8500 4.2000 3.4600
Columns 8 through 14
2.7000 3.9000 3.5000 4.1000 3.6500 4.0200 4.0000
Columns 15 through 21
2.9800 2.8400 4.2100 3.1500 3.4000 3.4500 4.3600
Columns 22 through 28
7.6400 3.9000 3.9500 3.2000 2.9600 5.6200 4.1000
Columns 29 through 31
3.9000 5.4600 4.2200