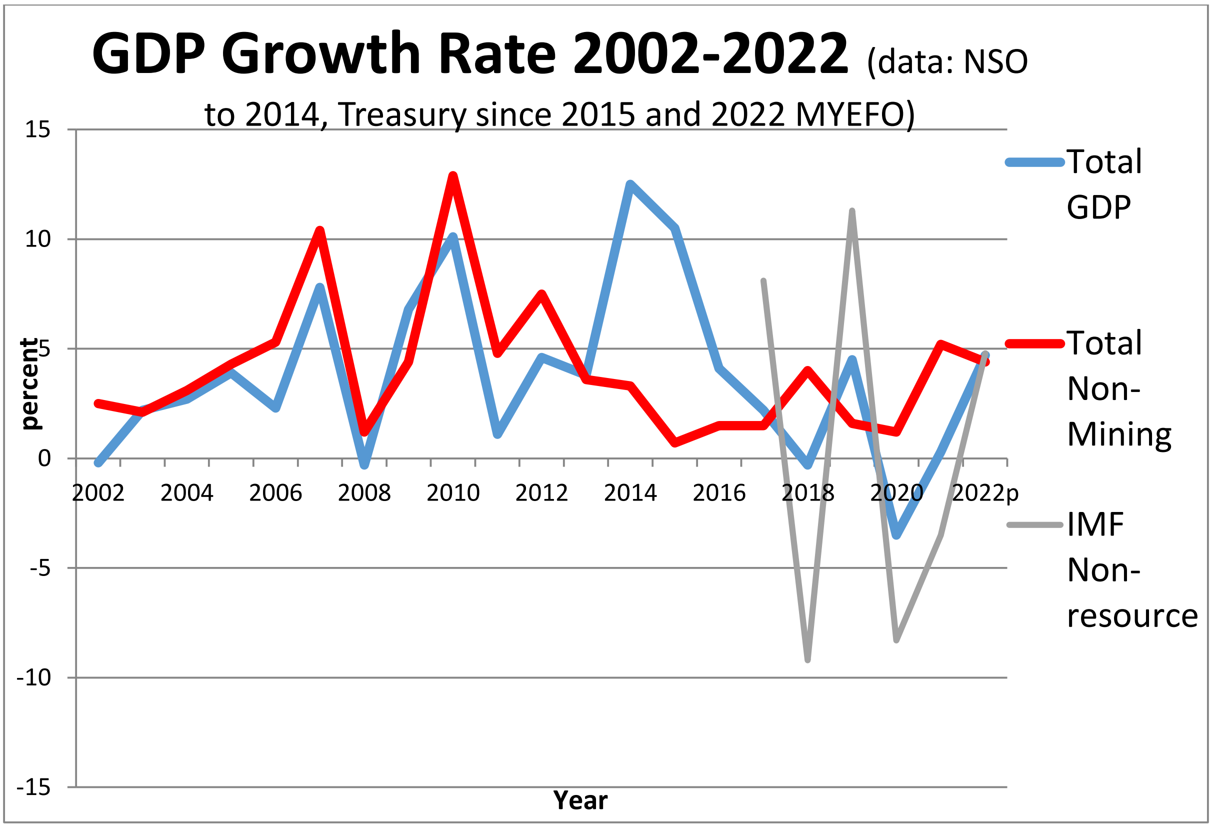
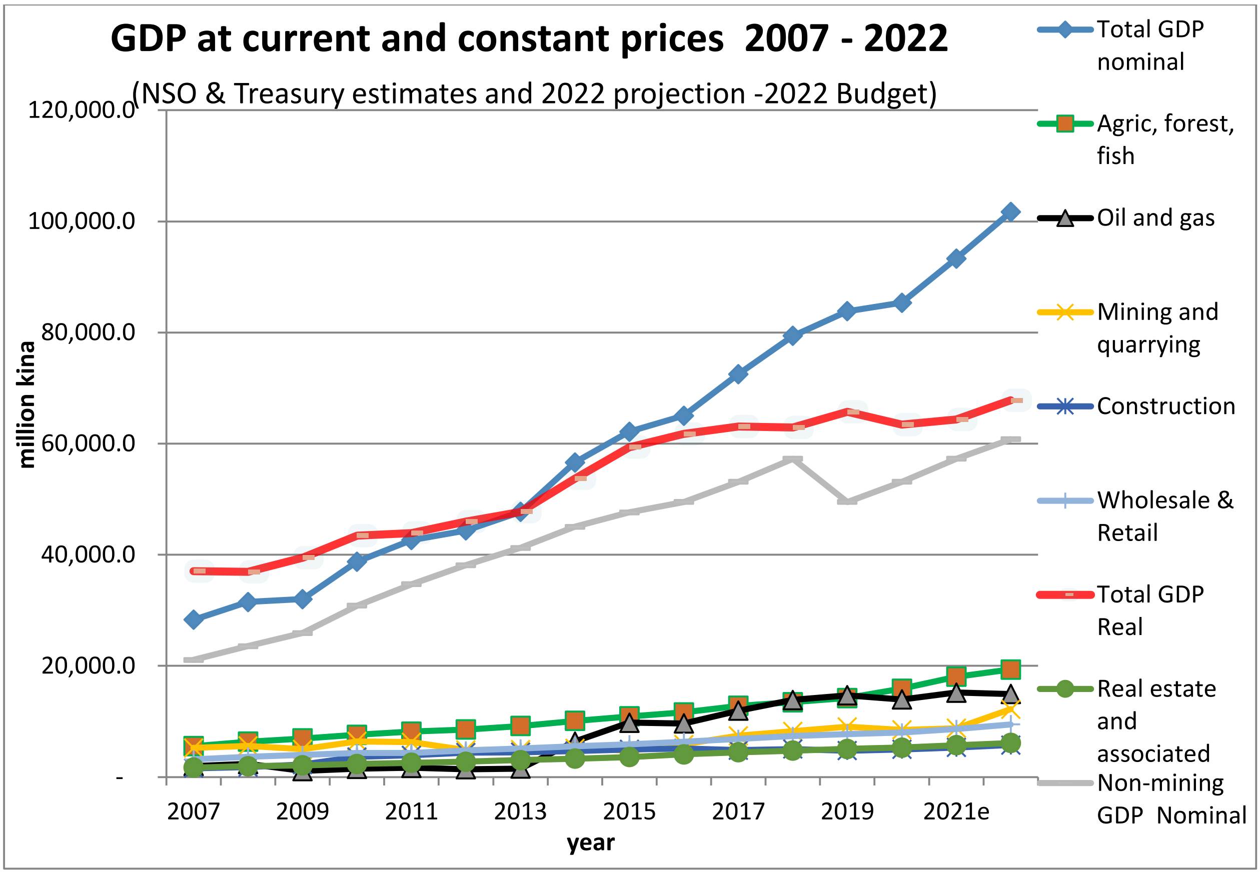
PNG's Economy 2022– past, present and future prospects

By Paul Barker, Executive Director, Institute of National Affairs

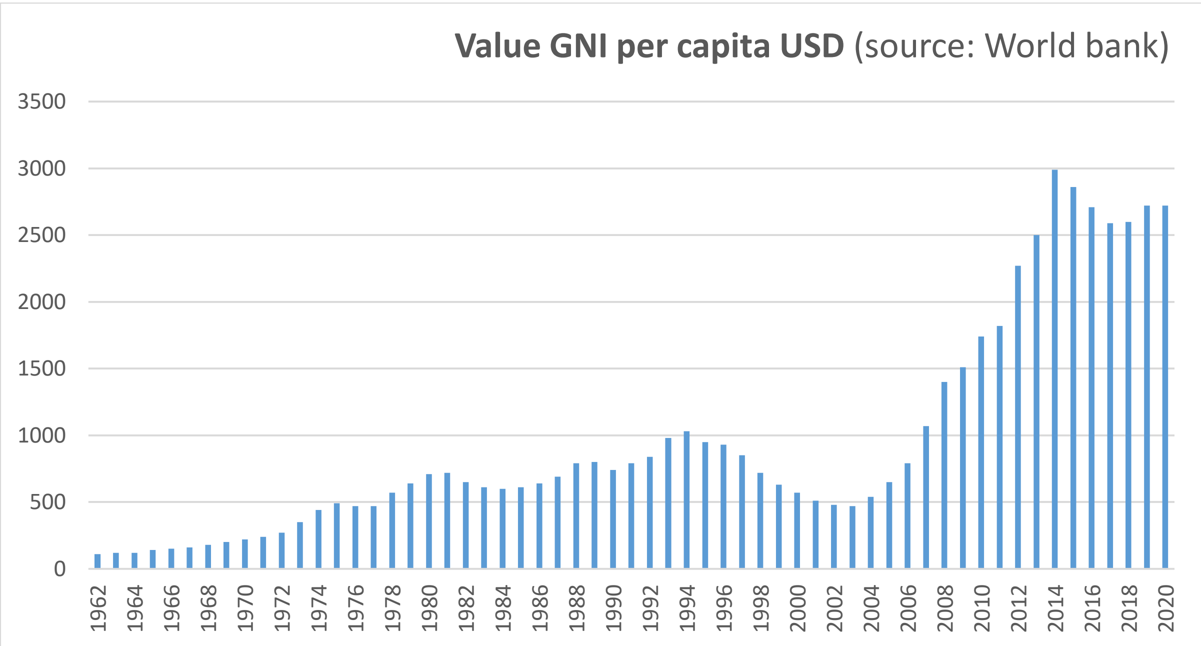
Overview

Economic Performance and Issues:

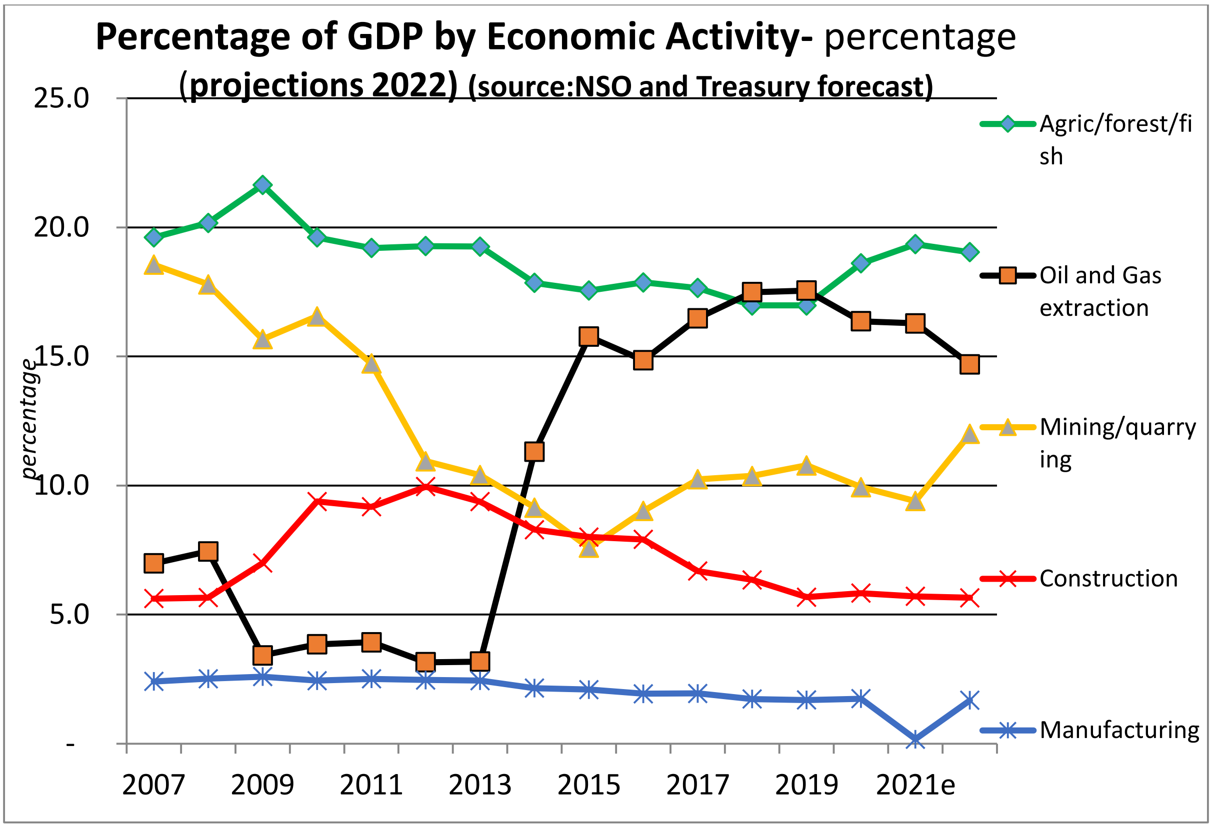


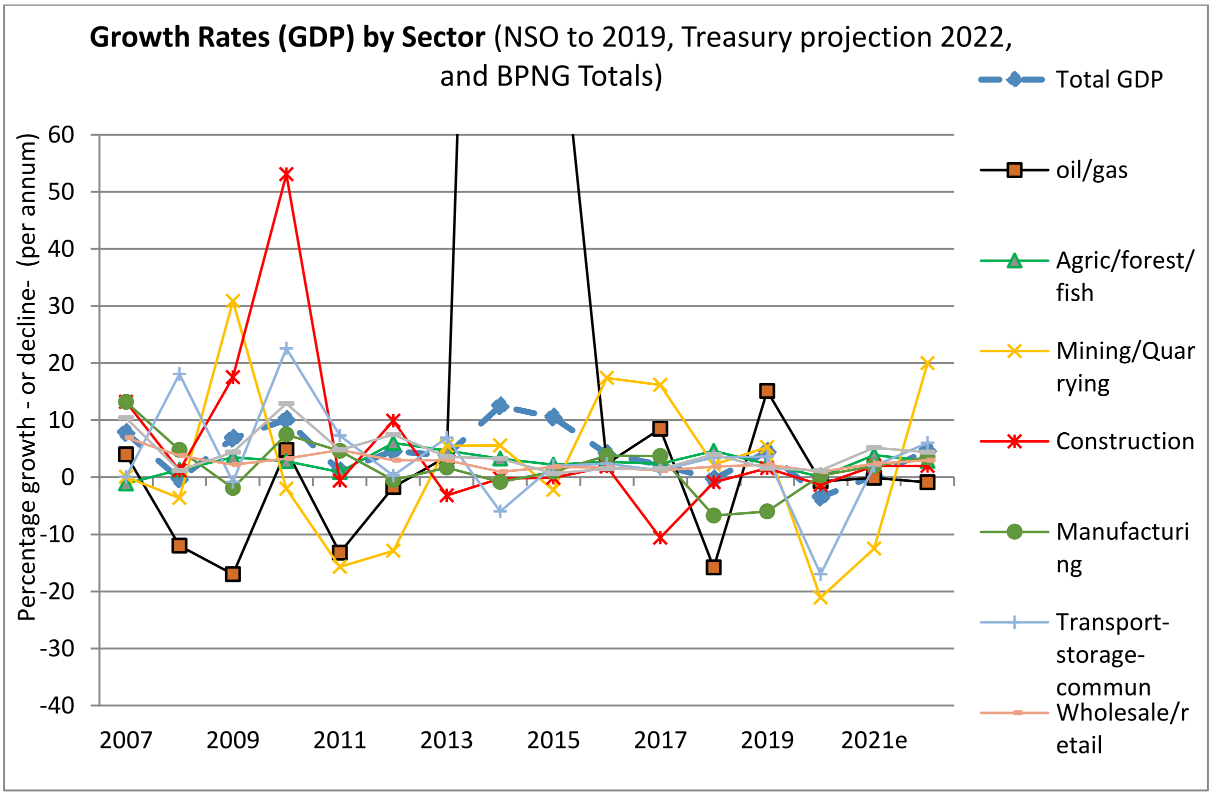


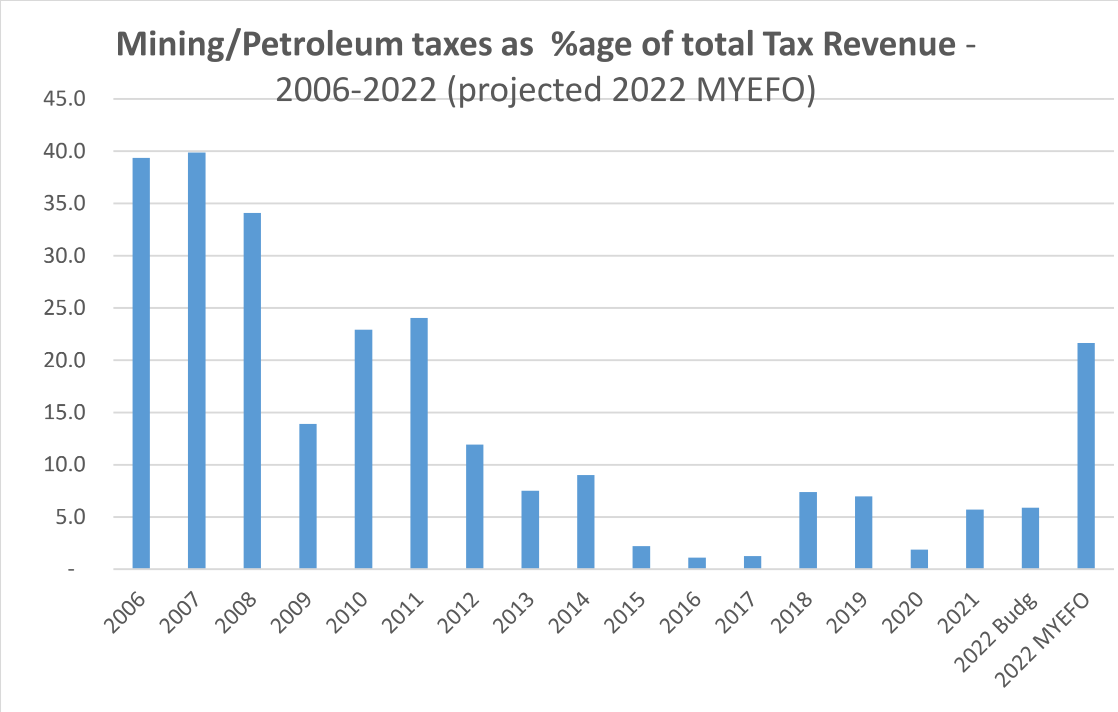
GDP at current and constant prices 2007 - 2022
(NSO & Treasury estimates and 2022 projection -2022 Budget)
120,000.0
100,000.0
80,000.0
60,000.0
40,000.0
20,000.0
-
million kina
2007
2009
2011
2013
2015
2017
2019
2021e
year
Total GDP nominal
Agric, forest, fish
Oil and gas
Mining and quarrying
Construction
Wholesale & Retail
Total GDP Real
Real estate and associated
Non-mining GDP Nominal

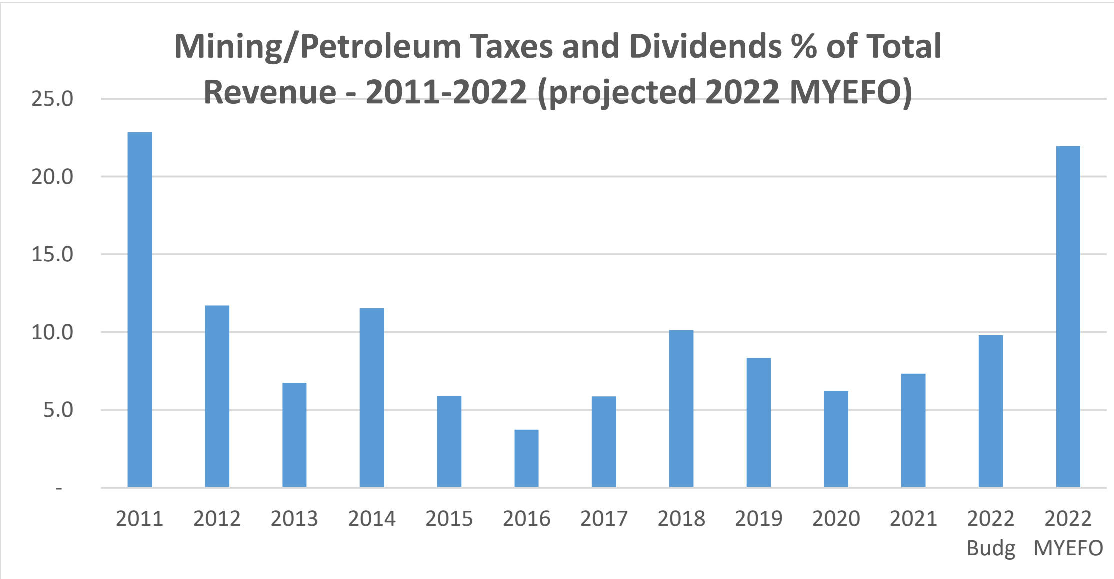


Value GNI per capita USD (source: World bank)
3500
3000
2500
2000
1500
1000
500
0
1962
1964
1966
1968
1970
1972
1974
1976
1978
1980
1982
1984
1986
1988
1990
1992
1994
1996
1998
2000
2002
2004
2006
2008
2010
2012
2014
2016
2018
2020

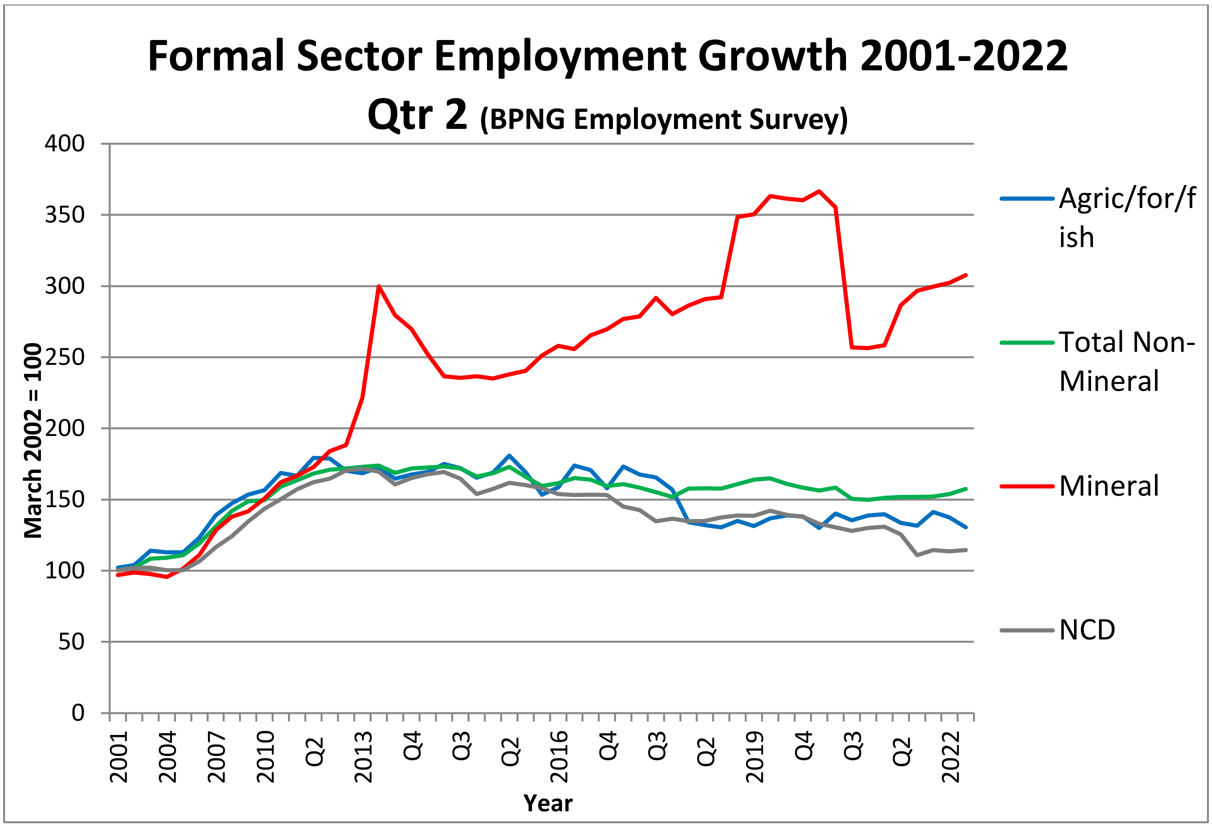

Percentage of GDP by Economic Activity- percentage
(projections 2022) (source:NSO and Treasury forecast)
percentage
25.0
20.0
15.0
10.0
5.0
-
2007
2009
2011
2013
2015
2017
2019
2021e
Agric/forest/fish
Oil and Gas extraction
Mining/quarrying
Construction
Manufacturing

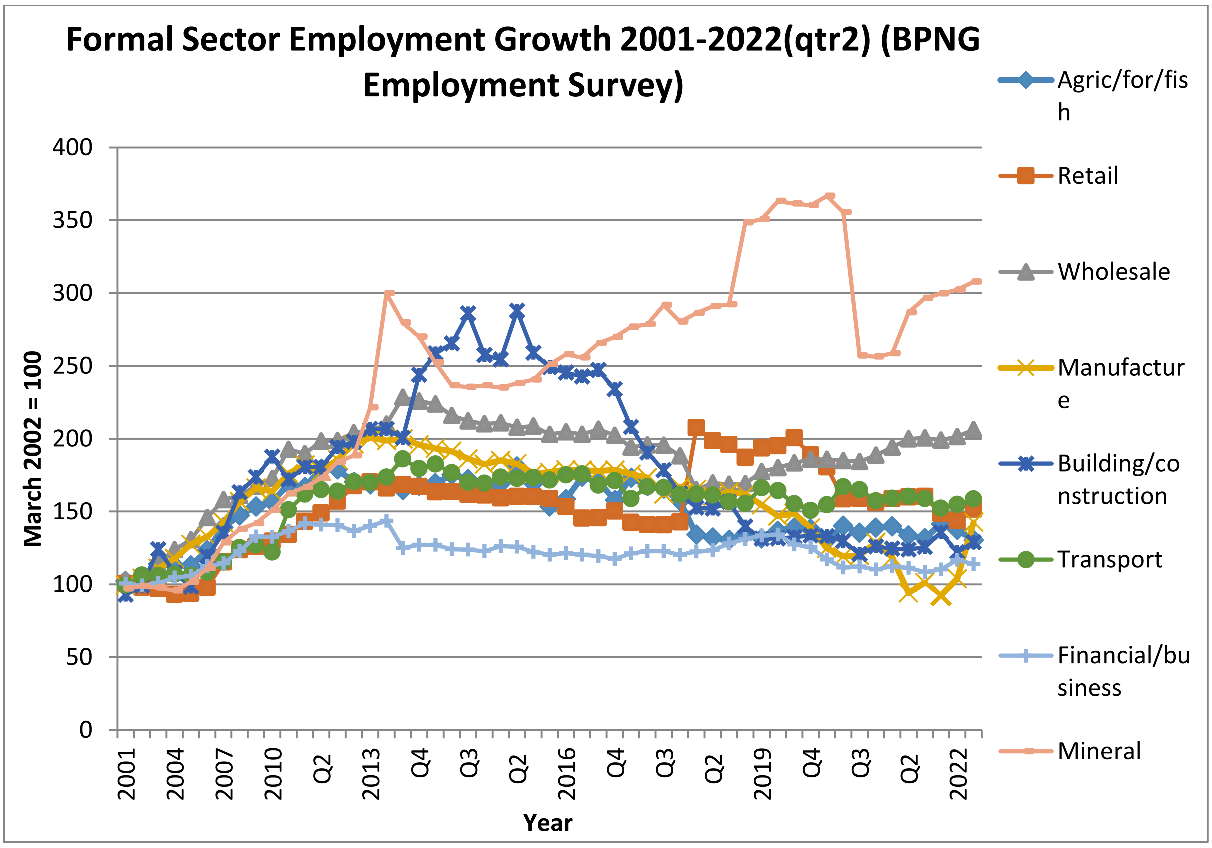

Growth Rates (GDP) by Sector (NSO to 2019, Treasury projection 2022, and BPNG Totals)
Percentage growth - or decline- (per annum)
60
50
40
30
20
10
0
-10
-20
-30
-40
2007
2009
2011
2013
2015
2017
2019
2021e
Total GDP
oil/gas
Agric/forest/fish
Mining/Quarrying
Construction
Manufacturing
Transport-storage-commun
Wholesale/retail


Mining/Petroleum taxes as %age of total Tax Revenue - 2006-2022 (projected 2022 MYEFO)
45.0
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
-
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022 Budg
2022 MYEFO

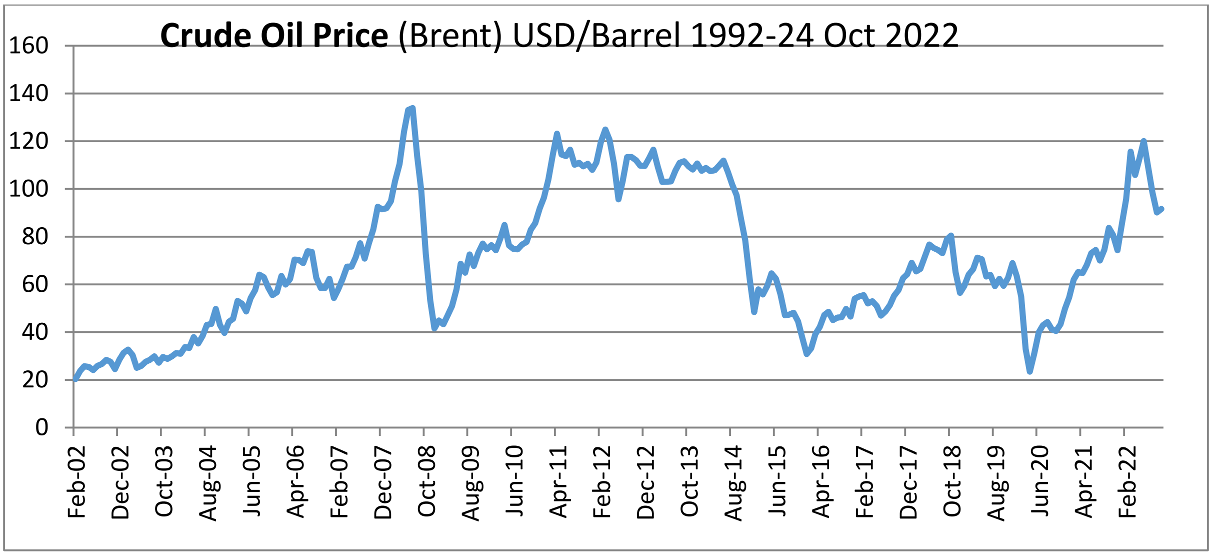

Mining/Petroleum Taxes and Dividends % of Total Revenue - 2011-2022 (projected 2022 MYEFO)
25.0
20.0
15.0
10.0
5.0
-
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022 Budg
2022 MYEFO

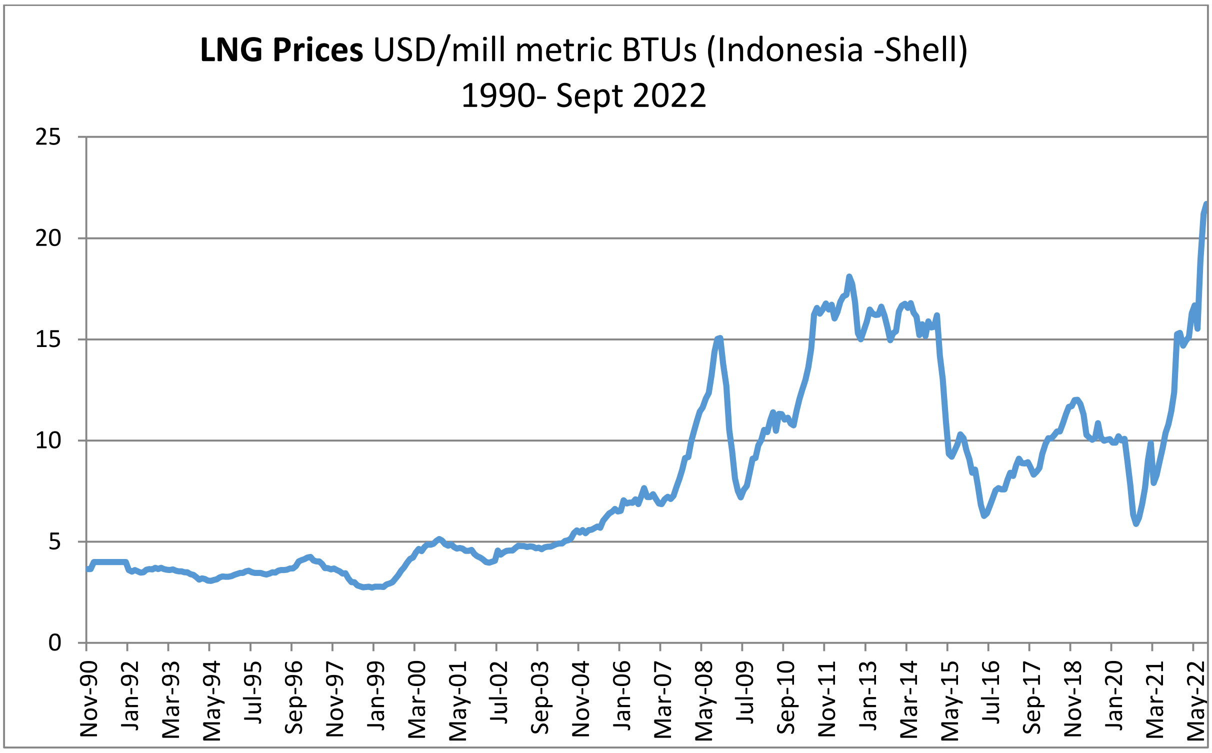
Employment:

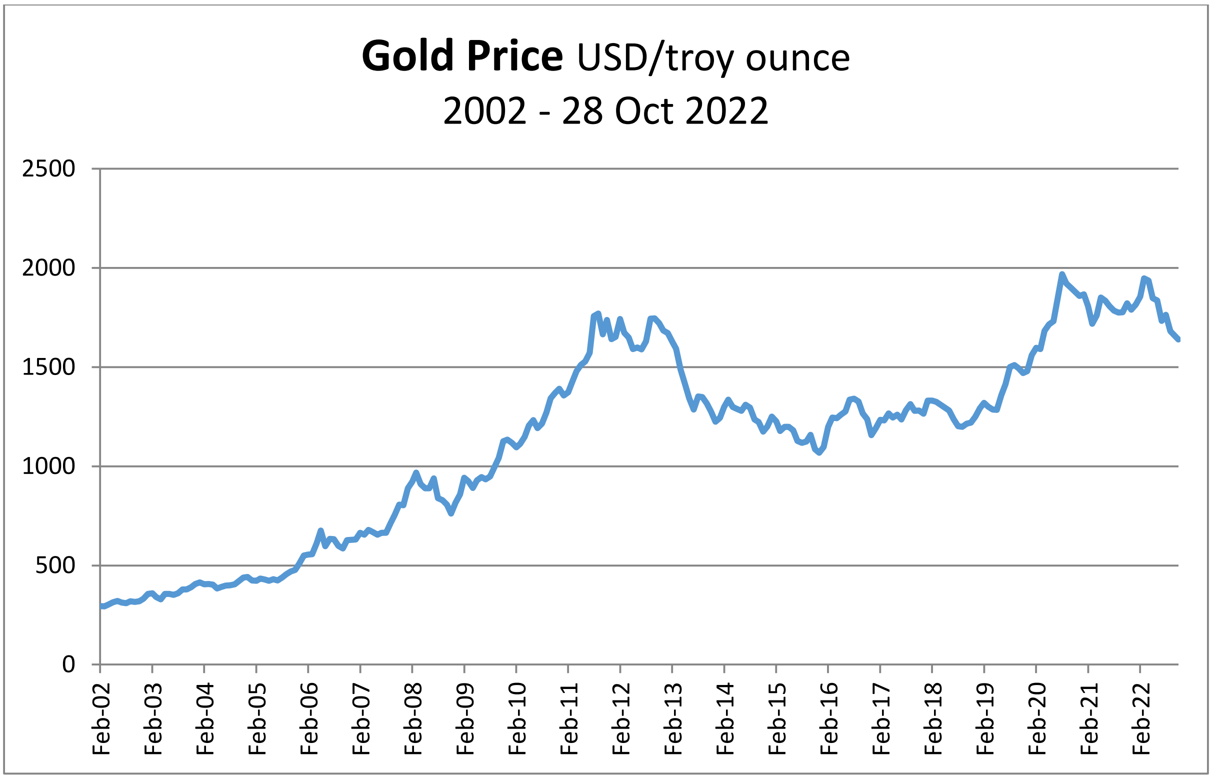

Formal Sector Employment Growth 2001-2022 Qtr 2 (BPNG Employment Survey)
March 2002 = 100
400
350
300
250
200
150
100
50
0
2001
2004
2007
2010
Q2
2013
Q4
Q3
Q2
2016
Q4
Q3
Q2
2019
Q4
Q3
Q2
2022
Year
Agric/for/fish
Total Non-Mineral
Mineral
NCD


Formal Sector Employment Growth 2001-2022(qtr2) (BPNG Employment Survey)
March 2002 = 100
400
350
300
250
200
150
100
50
0
2001
2004
2007
2010
Q2
2013
Q4
Q3
Q2
2016
Q4
Q3
Q2
2019
Q4
Q3
Q2
2022
Year
Agric/for/fish
Retail
Wholesale
Manufacture
Building/construction
Transport
Financial/business
Mineral

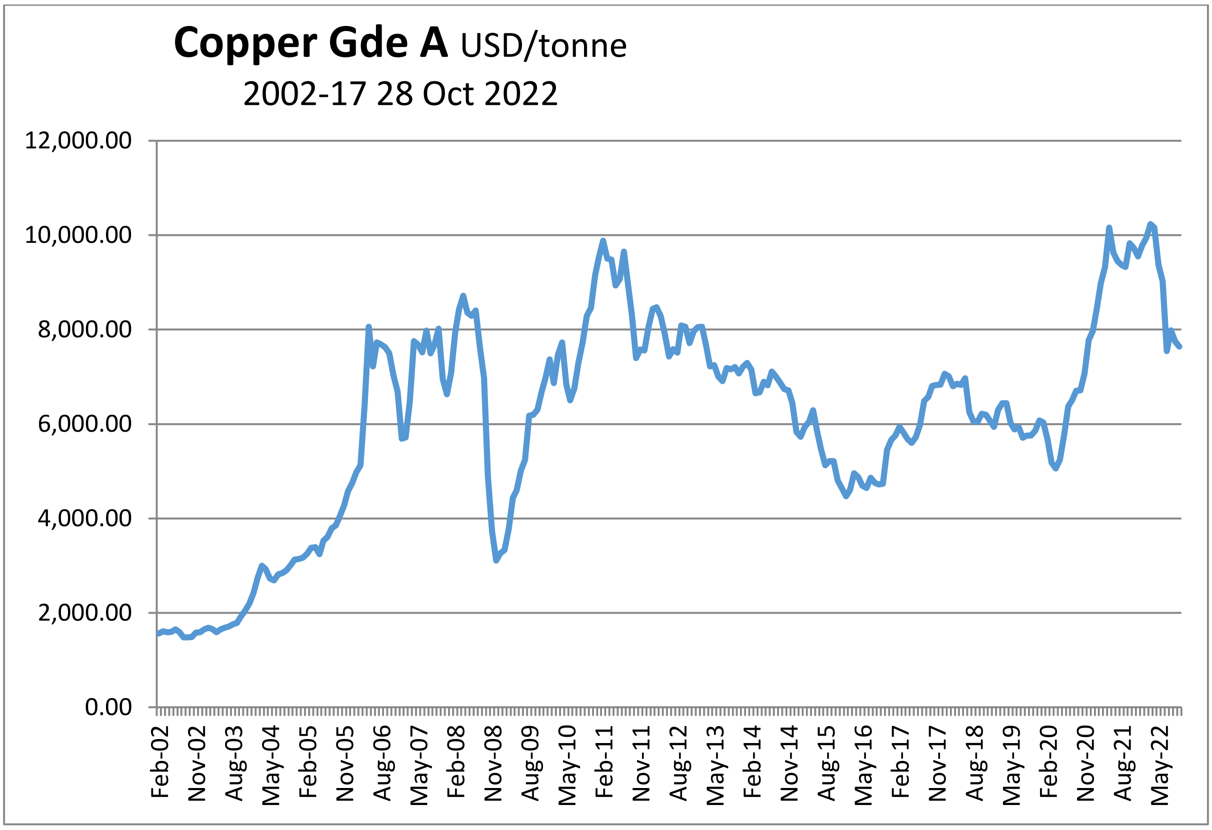
Commodities and Markets:



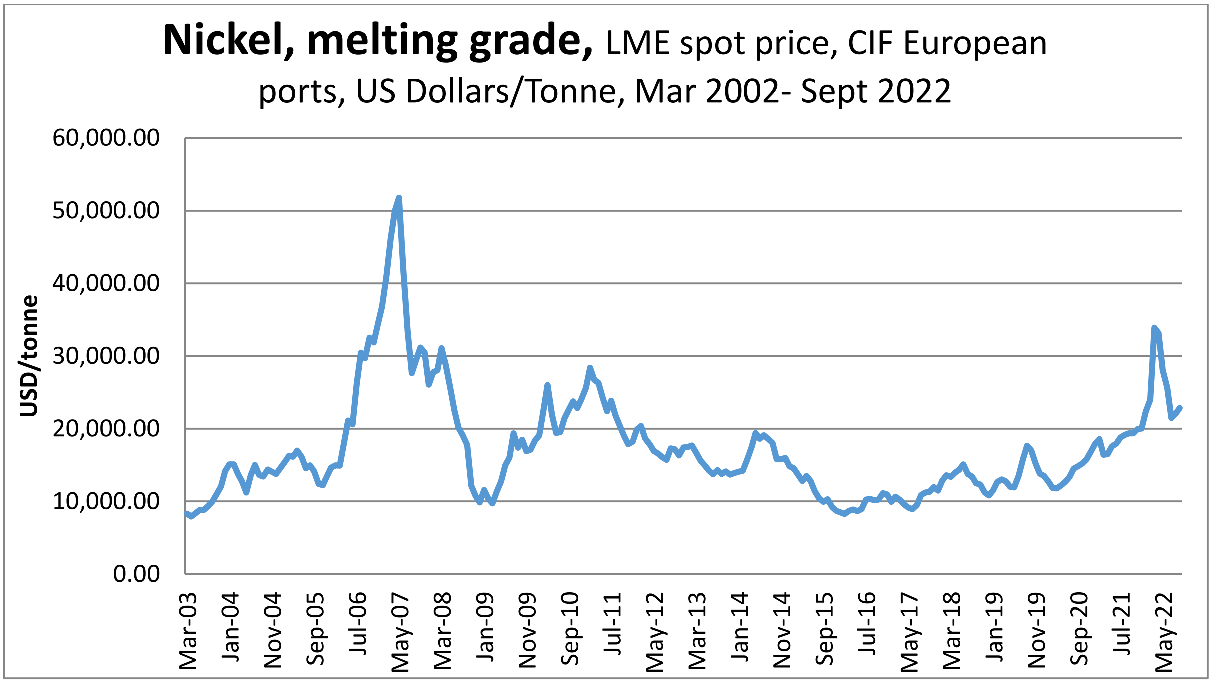


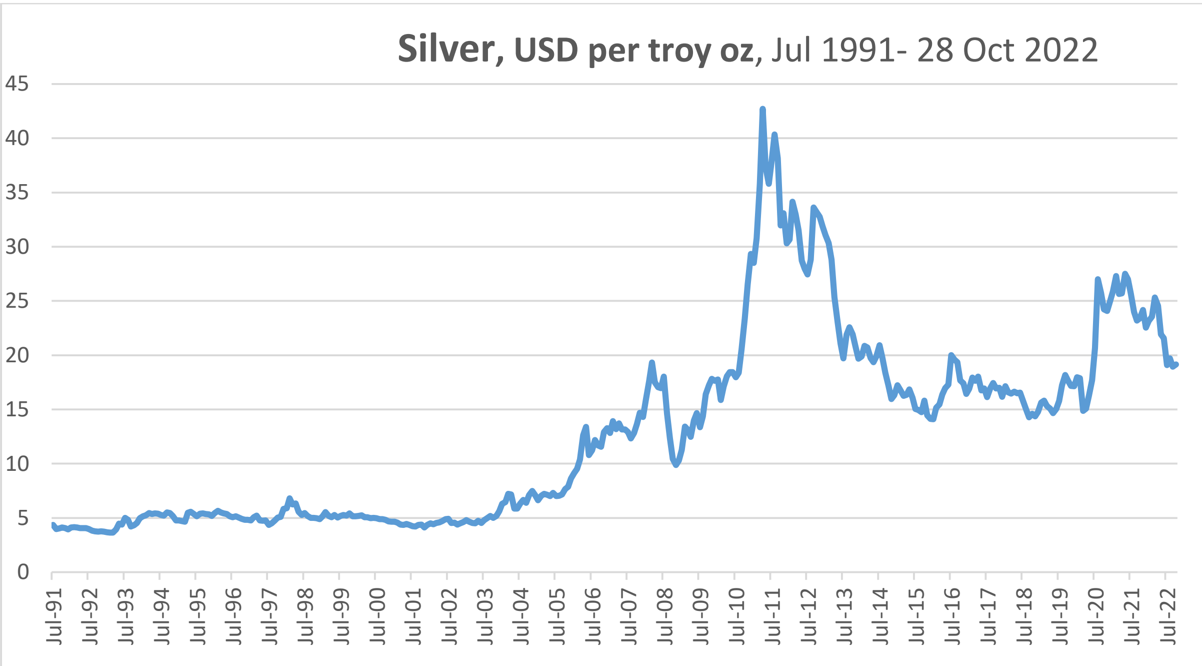


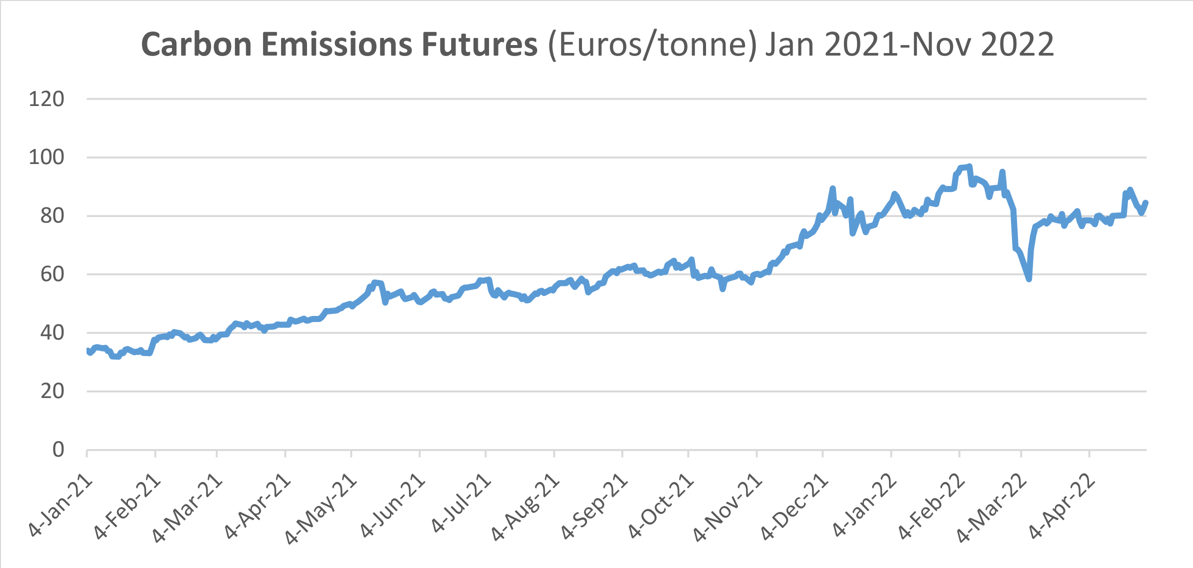
Gold Price USD/troy ounce
2002 - 28 Oct 2022
2500
2000
1500
1000
500
0
Feb-02
Feb-03
Feb-04
Feb-05
Feb-06
Feb-07
Feb-08
Feb-09
Feb-10
Feb-11
Feb-12
Feb-13
Feb-14
Feb-15
Feb-16
Feb-17
Feb-18
Feb-19
Feb-20
Feb-21
Feb-22

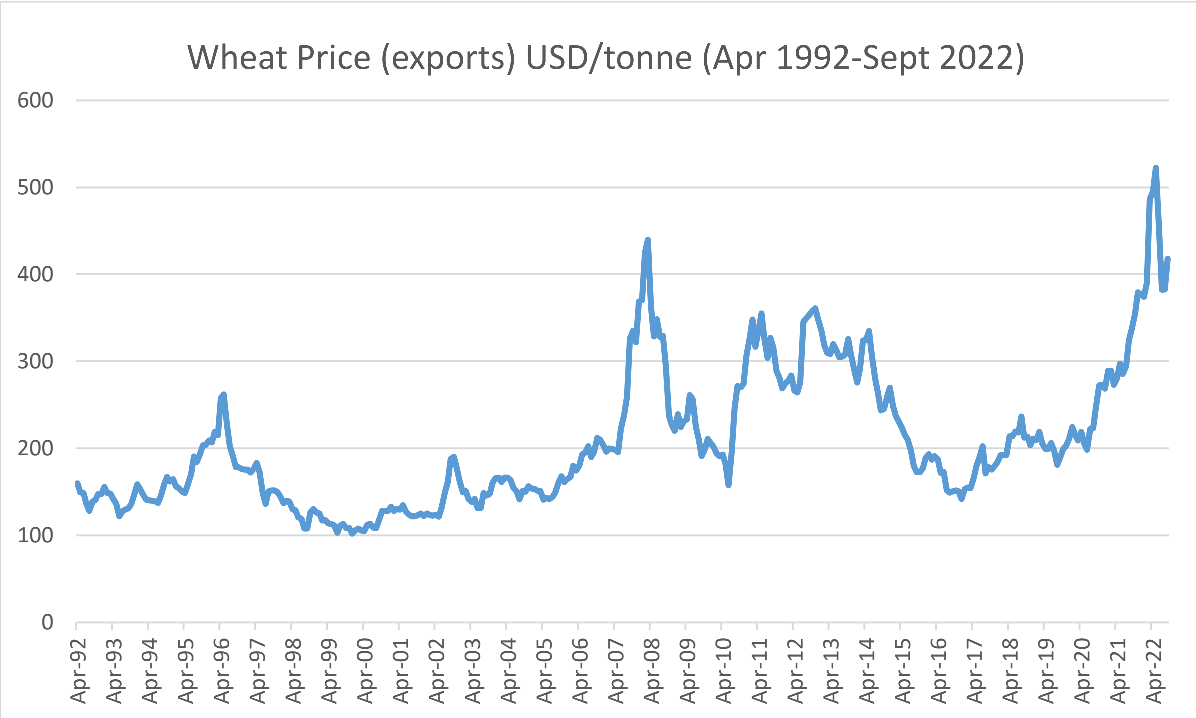


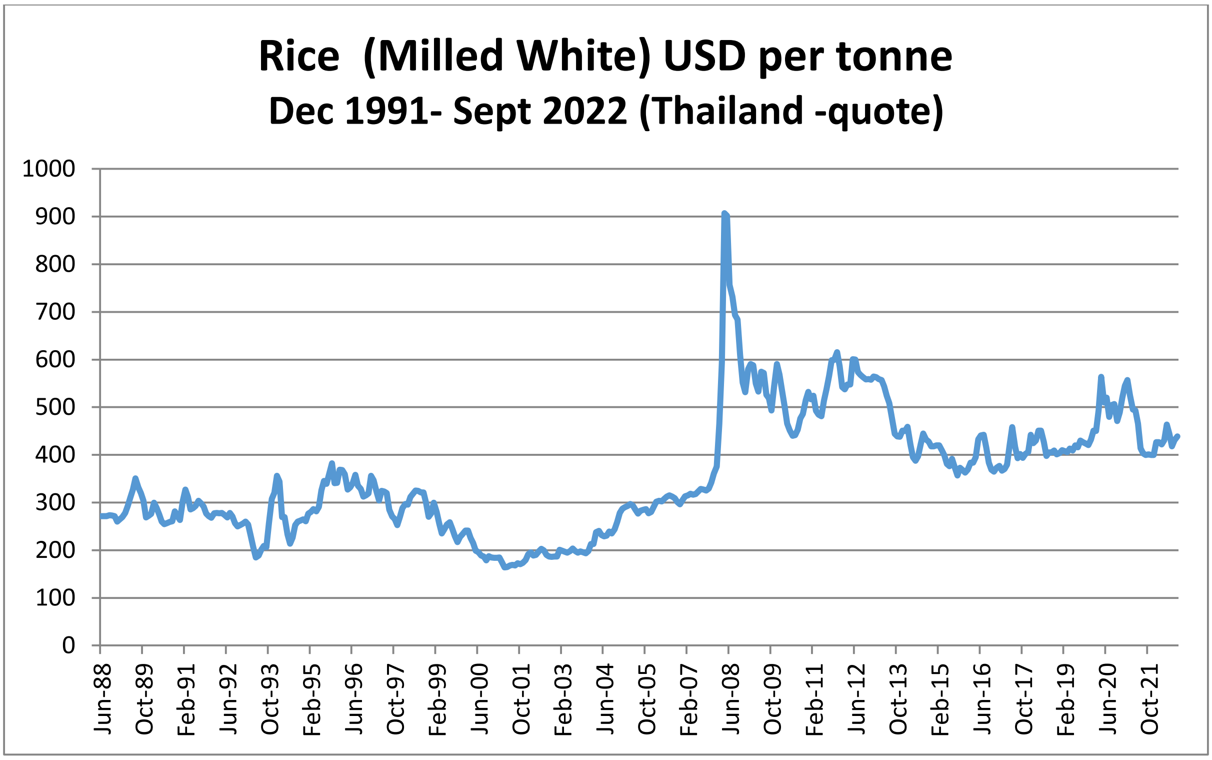
Copper Gde A USD/tonne
2002-17 28 Oct 2022
12,000.00
10,000.00
8,000.00
6,000.00
4,000.00
2,000.00
0.00
Feb-02
Nov-02
Aug-03
May-04
Feb-05
Nov-05
Aug-06
May-07
Feb-08
Nov-08
Aug-09
May-10
Feb-11
Nov-11
Aug-12
May-13
Feb-14
Nov-14
Aug-15
May-16
Feb-17
Nov-17
Aug-18
May-19
Feb-20
Nov-20
Aug-21
May-22

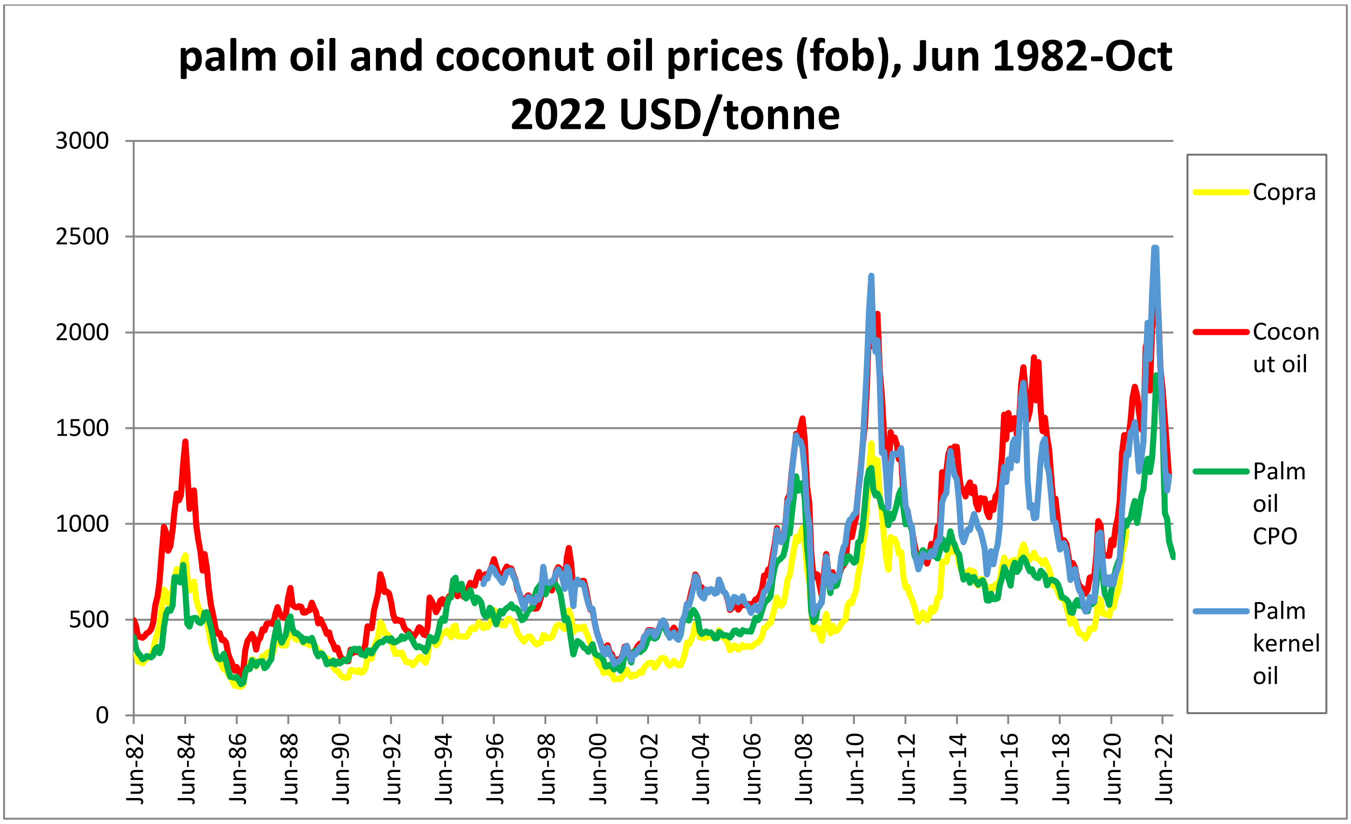

Nickel, melting grade, LME spot price, CIF European ports, US Dollars/Tonne, Mar 2002- Sept 2022
USD/tonne
60,000.00
50,000.00
40,000.00
30,000.00
20,000.00
10,000.00
0.00
Mar-03
Jan-04
Nov-04
Sep-05
Jul-06
May-07
Mar-08
Jan-09
Nov-09
Sep-10
Jul-11
May-12
Mar-13
Jan-14
Nov-14
Sep-15
Jul-16
May-17
Mar-18
Jan-19
Nov-19
Sep-20
Jul-21
May-22

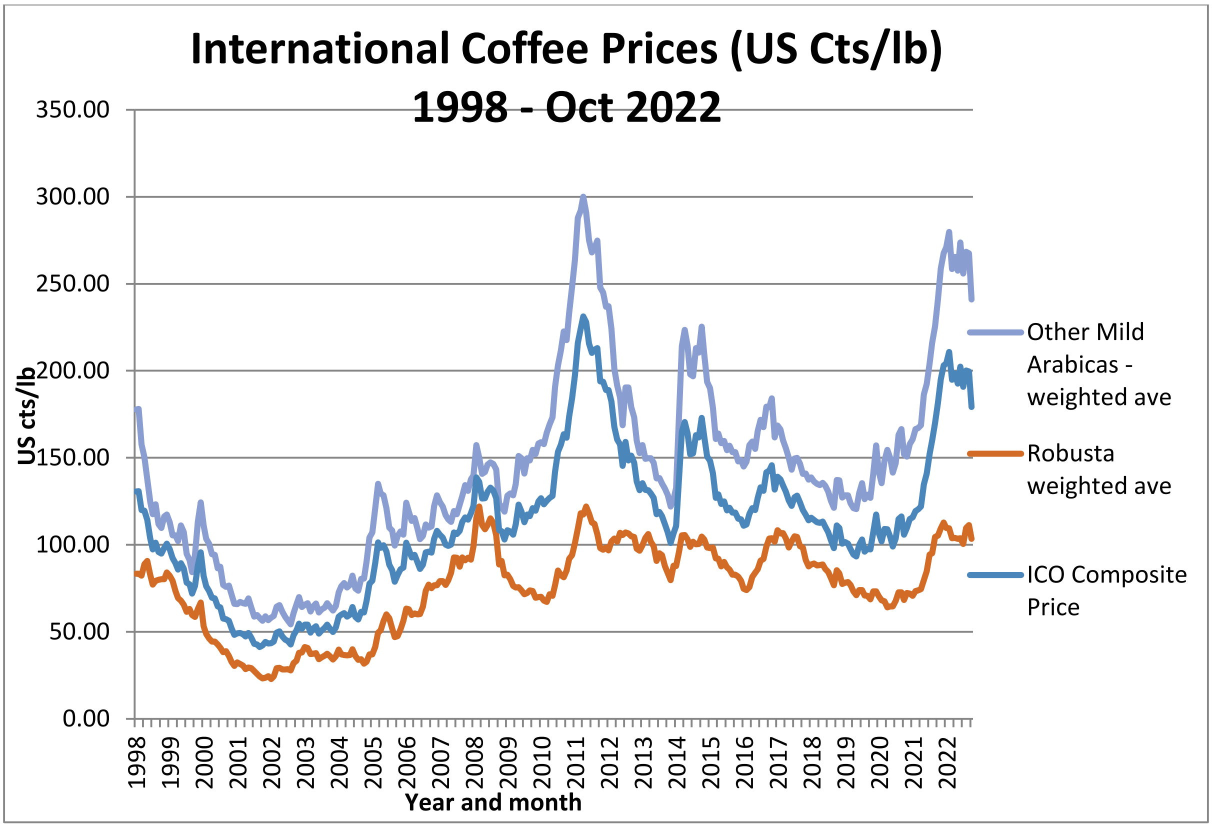

Silver, USD per troy oz, Jul 1991- 28 Oct 2022
45
40
35
30
25
20
15
10
5
0
Jul-91
Jul-92
Jul-93
Jul-94
Jul-95
Jul-96
Jul-97
Jul-98
Jul-99
Jul-00
Jul-01
Jul-02
Jul-03
Jul-04
Jul-05
Jul-06
Jul-07
Jul-08
Jul-09
Jul-10
Jul-11
Jul-12
Jul-13
Jul-14
Jul-15
Jul-16
Jul-17
Jul-18
Jul-19
Jul-20
Jul-21
Jul-22


Carbon Emissions Futures (Euros/tonne) Jan 2021-Nov 2022
120
100
80
60
40
20
0
4-Jan-21
4-Feb-21
4-Mar-21
4-Apr-21
4-May-21
4-Jun-21
4-Jul-21
4-Aug-21
4-Sep-21
4-Oct-21
4-Nov-21
4-Dec-21
4-Jan-22
4-Feb-22
4-Mar-22
4-Apr-22

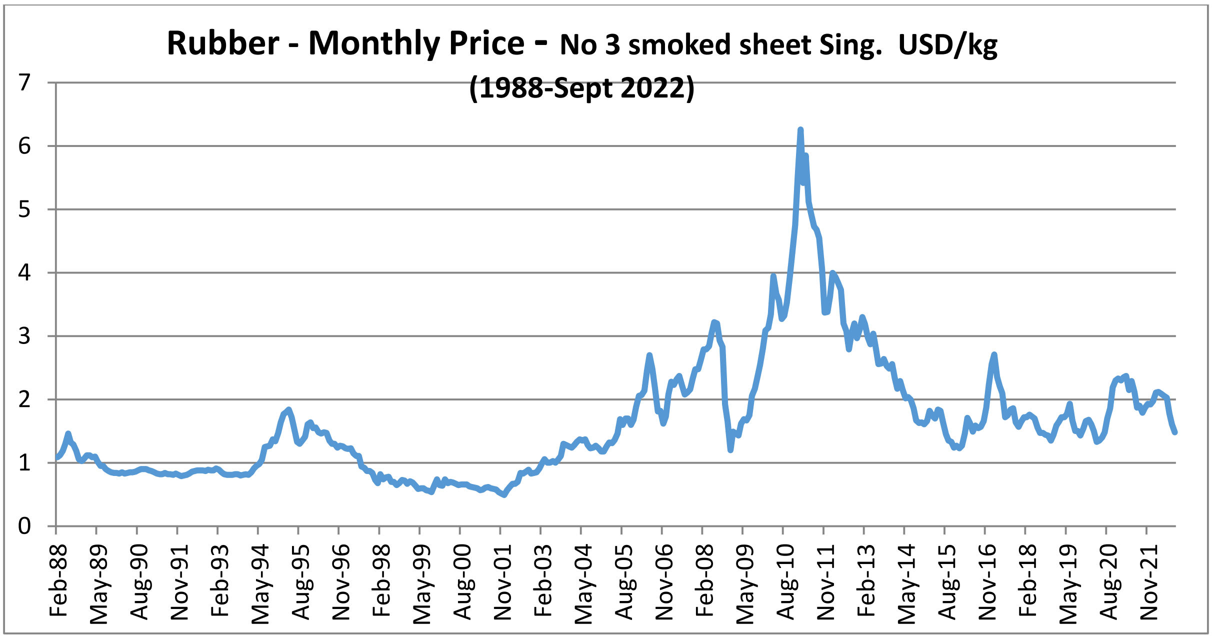

Wheat Price (exports) USD/tonne (Apr 1992-Sept 2022)
600
500
400
300
200
100
0
Apr-92
Apr-93
Apr-94
Apr-95
Apr-96
Apr-97
Apr-98
Apr-99
Apr-00
Apr-01
Apr-02
Apr-03
Apr-04
Apr-05
Apr-06
Apr-07
Apr-08
Apr-09
Apr-10
Apr-11
Apr-12
Apr-13
Apr-14
Apr-15
Apr-16
Apr-17
Apr-18
Apr-19
Apr-20
Apr-21
Apr-22


Rice (Milled White) USD per tonne
Dec 1991- Sept 2022 (Thailand -quote)
1000
900
800
700
600
500
400
300
200
100
0
Jun-88
Oct-89
Feb-91
Jun-92
Oct-93
Feb-95
Jun-96
Oct-97
Feb-99
Jun-00
Oct-01
Feb-03
Jun-04
Oct-05
Feb-07
Jun-08
Oct-09
Feb-11
Jun-12
Oct-13
Feb-15
Jun-16
Oct-17
Feb-19
Jun-20
Oct-21

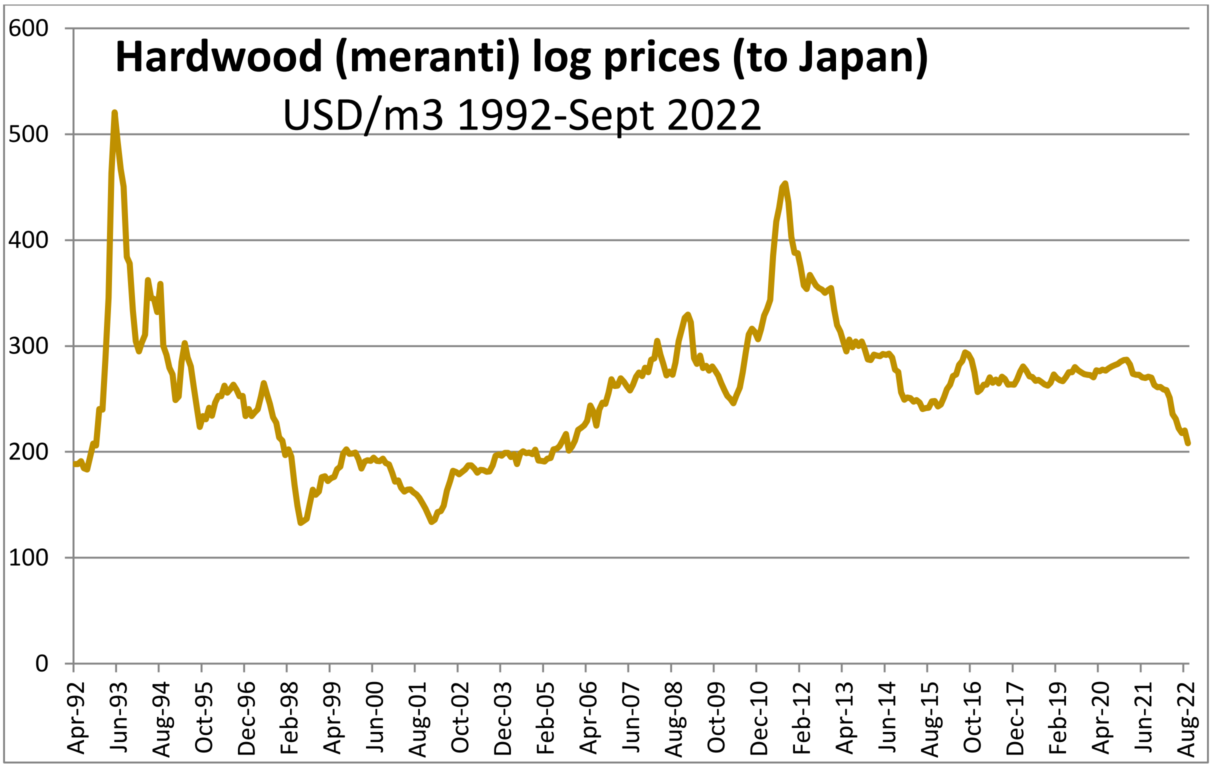

palm oil and coconut oil prices (fob), Jun 1982-Oct 2022 USD/tonne
3000
2500
2000
1500
1000
500
0
Jun-82
Jun-84
Jun-86
Jun-88
Jun-90
Jun-92
Jun-94
Jun-96
Jun-98
Jun-00
Jun-02
Jun-04
Jun-06
Jun-08
Jun-10
Jun-12
Jun-14
Jun-16
Jun-18
Jun-20
Jun-22
Copra
Coconut oil
Palm oil CPO
Palm kernel oil


International Coffee Prices (US Cts/lb)
1998 - Oct 2022
US cts/lb
350.00
300.00
250.00
200.00
150.00
100.00
50.00
0.00
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
Year and month
Other Mild Arabicas - weighted ave
Robusta weighted ave
ICO Composite Price

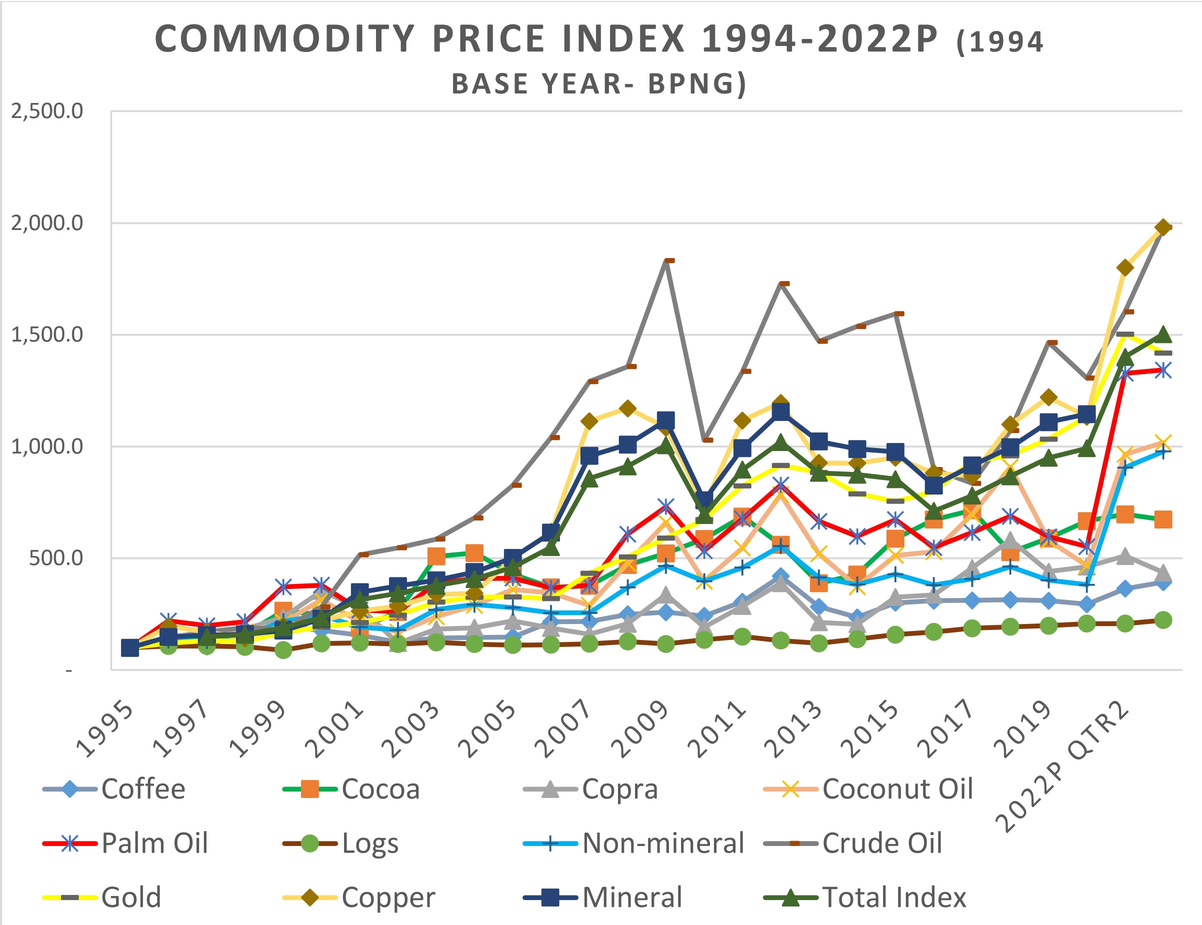

International Cocoa Price (ICCO) USD/tonne
Jan 2002 - Sept 2022
4,000.00
3,500.00
3,000.00
2,500.00
2,000.00
1,500.00
1,000.00
500.00
0.00
Sep-02
May-03
Jan-04
Sep-04
May-05
Jan-06
Sep-06
May-07
Jan-08
Sep-08
May-09
Jan-10
Sep-10
May-11
Jan-12
Sep-12
May-13
Jan-14
Sep-14
1-Apr-15
Dec-15
Aug-16
Apr-17
Dec-17
Aug-18
Apr-19
Dec-19
Aug-20
1-Apr-21
12/1/2021
15/8/2022

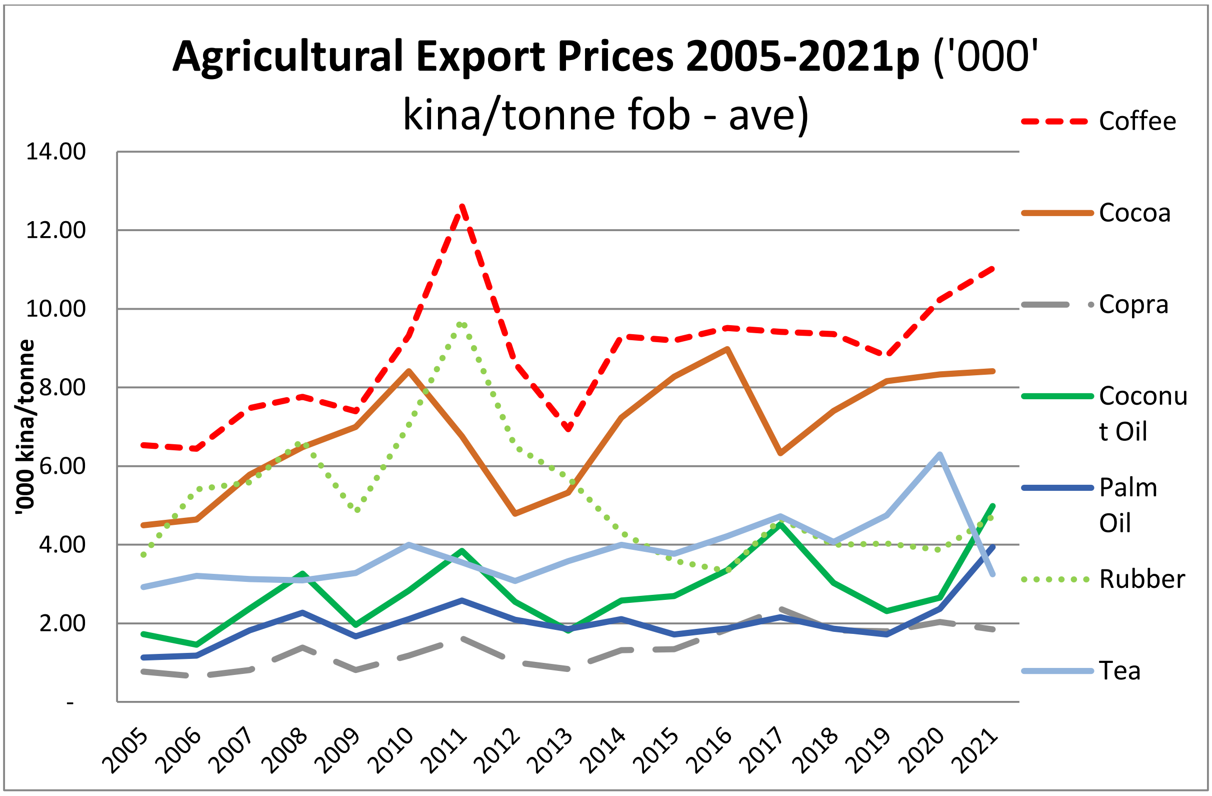


Rubber - Monthly Price - No 3 smoked sheet Sing. USD/kg
(1988-Sept 2022)
7
6
5
4
3
2
1
0
Feb-88
May-89
Aug-90
Nov-91
Feb-93
May-94
Aug-95
Nov-96
Feb-98
May-99
Aug-00
Nov-01
Feb-03
May-04
Aug-05
Nov-06
Feb-08
May-09
Aug-10
Nov-11
Feb-13
May-14
Aug-15
Nov-16
Feb-18
May-19
Aug-20
Nov-21



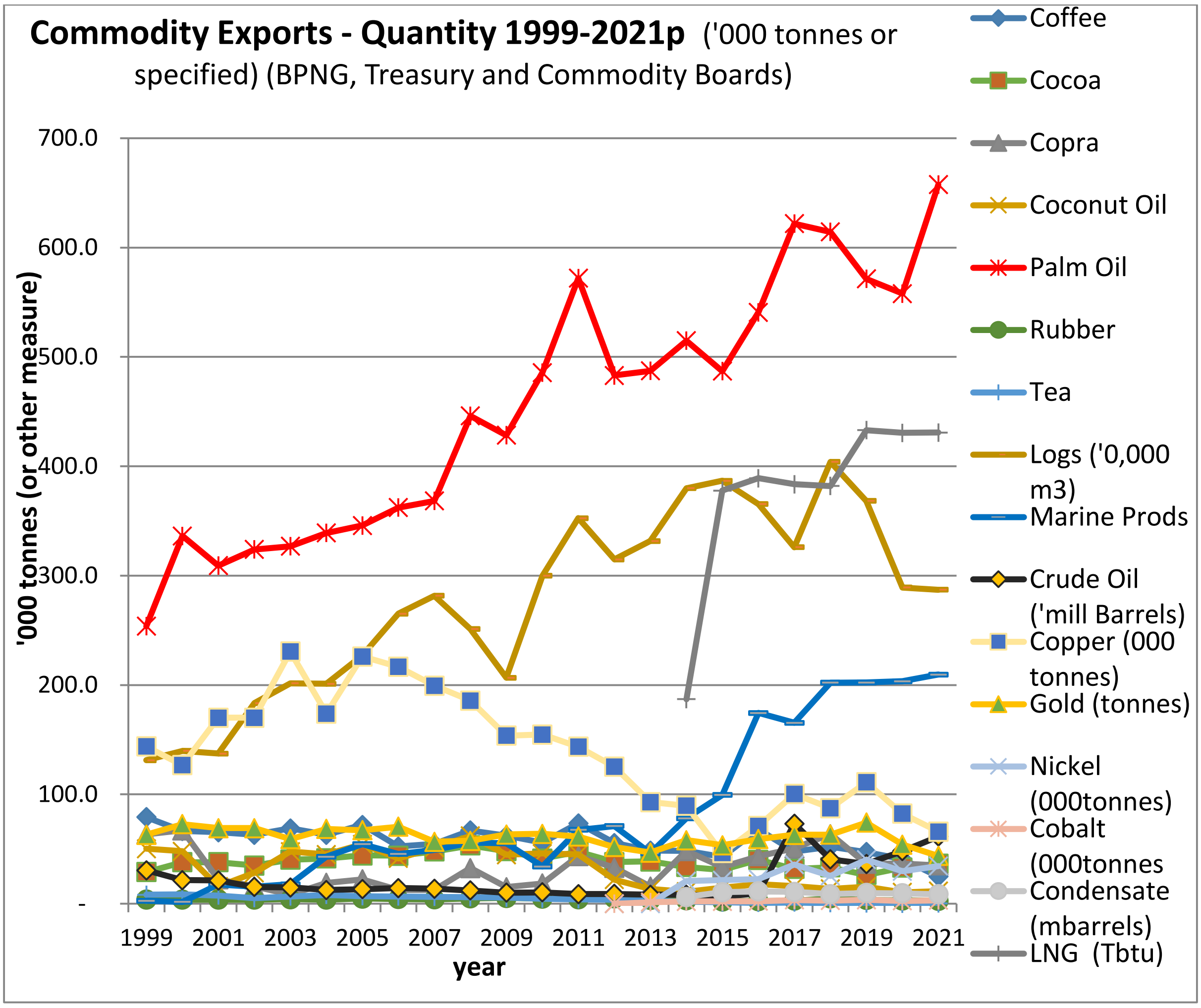
Hardwood (meranti) log prices (to Japan)
USD/m3 1992-Sept 2022
600
500
400
300
200
100
0
Apr-92
Jun-93
Aug-94
Oct-95
Dec-96
Feb-98
Apr-99
Jun-00
Aug-01
Oct-02
Dec-03
Feb-05
Apr-06
Jun-07
Aug-08
Oct-09
Dec-10
Feb-12
Apr-13
Jun-14
Aug-15
Oct-16
Dec-17
Feb-19
Apr-20
Jun-21
Aug-22

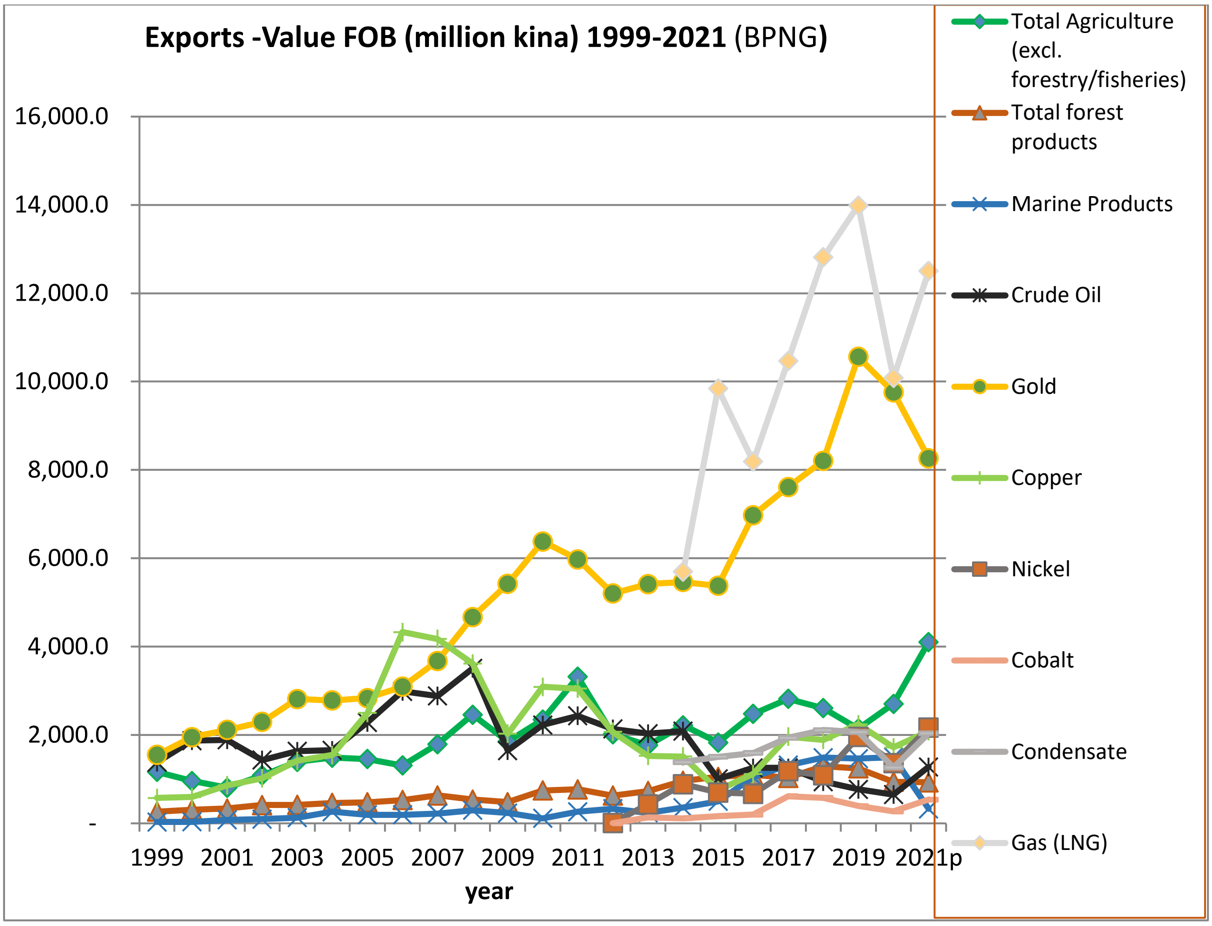

COMMODITY PRICE INDEX 1994-2022P (1994 BASE YEAR- BPNG)
2,500.0
2,000.0
1,500.0
1,000.0
500.0
-
1995
1997
1999
2001
2003
2005
2007
2009
2011
2013
2015
2017
2019
2022P QTR2
Coffee
Cocoa
Copra
Coconut Oil
Palm Oil
Logs
Non-mineral
Crude Oil
Gold
Copper
Mineral
Total Index

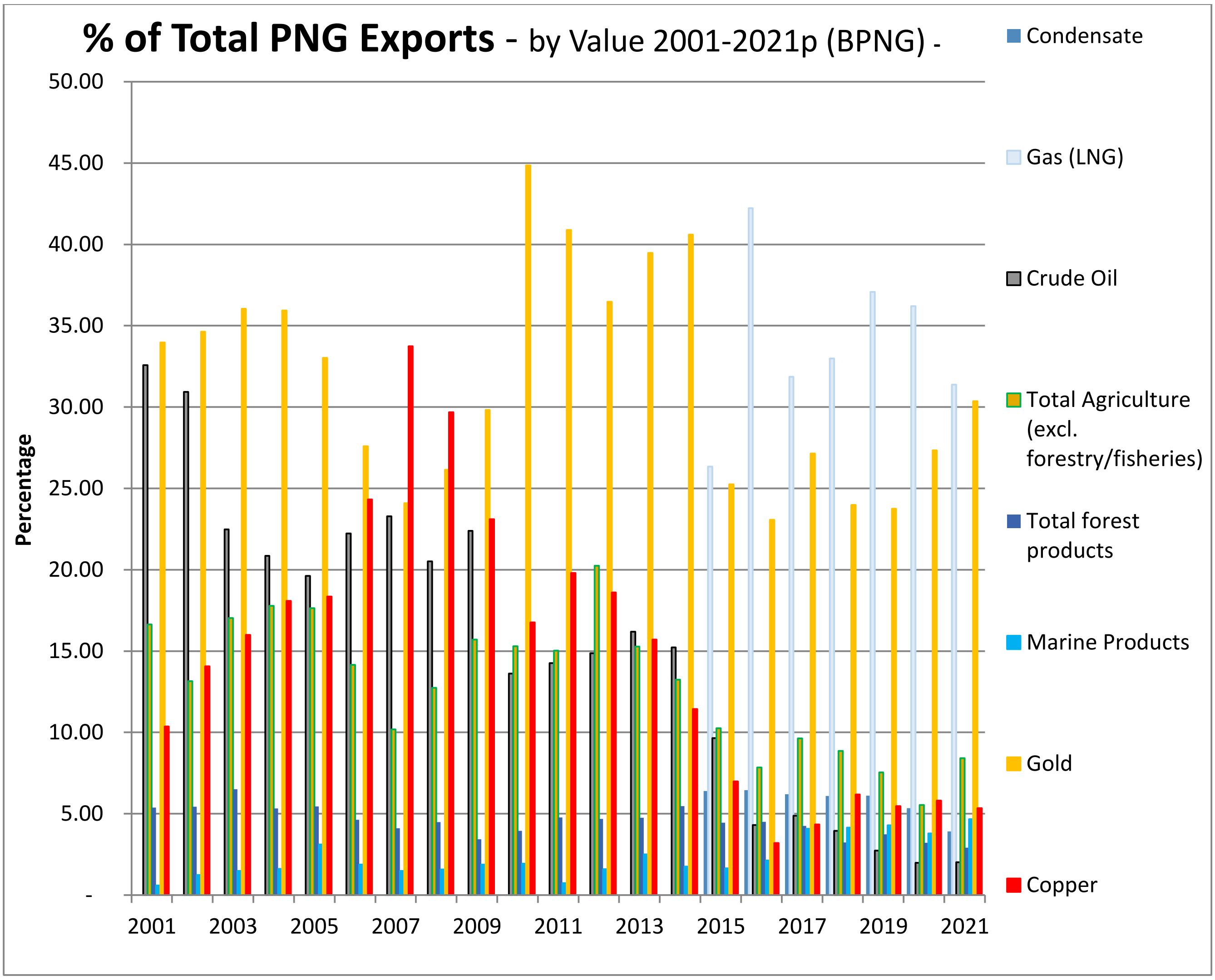

Agricultural Export Prices 2005-2021p ('000' kina/tonne fob - ave)
'000 kina/tonne
14.00
12.00
10.00
8.00
6.00
4.00
2.00
-
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
Coffee
Cocoa
Copra
Coconut Oil
Palm Oil
Rubber
Tea

Evolving Commodity Markets and Development Models:

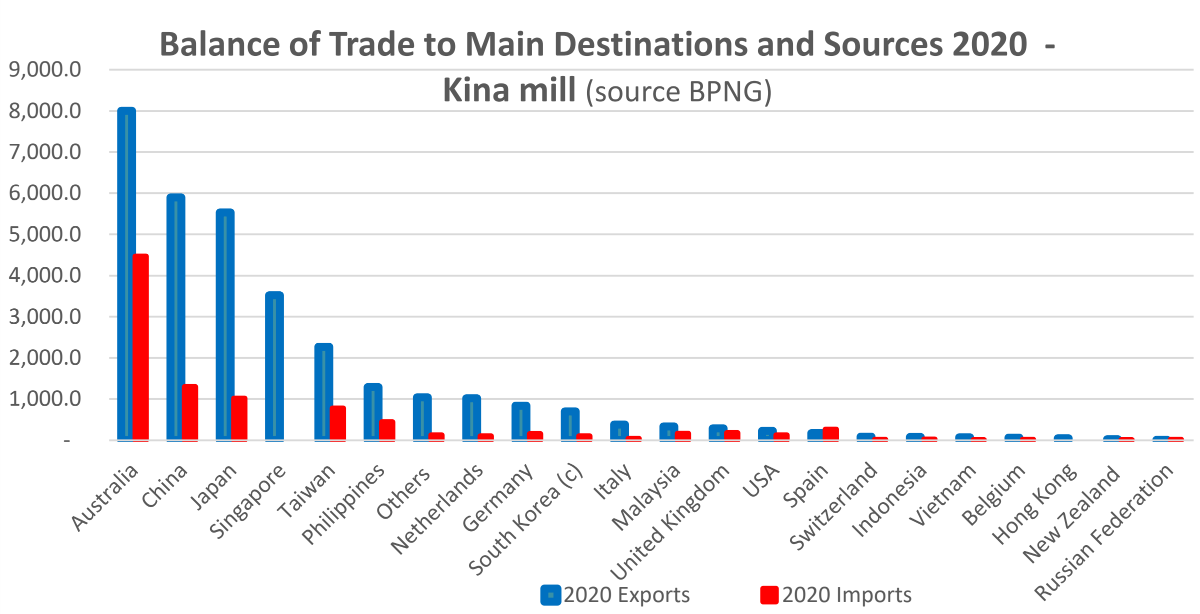
Production and Trade:



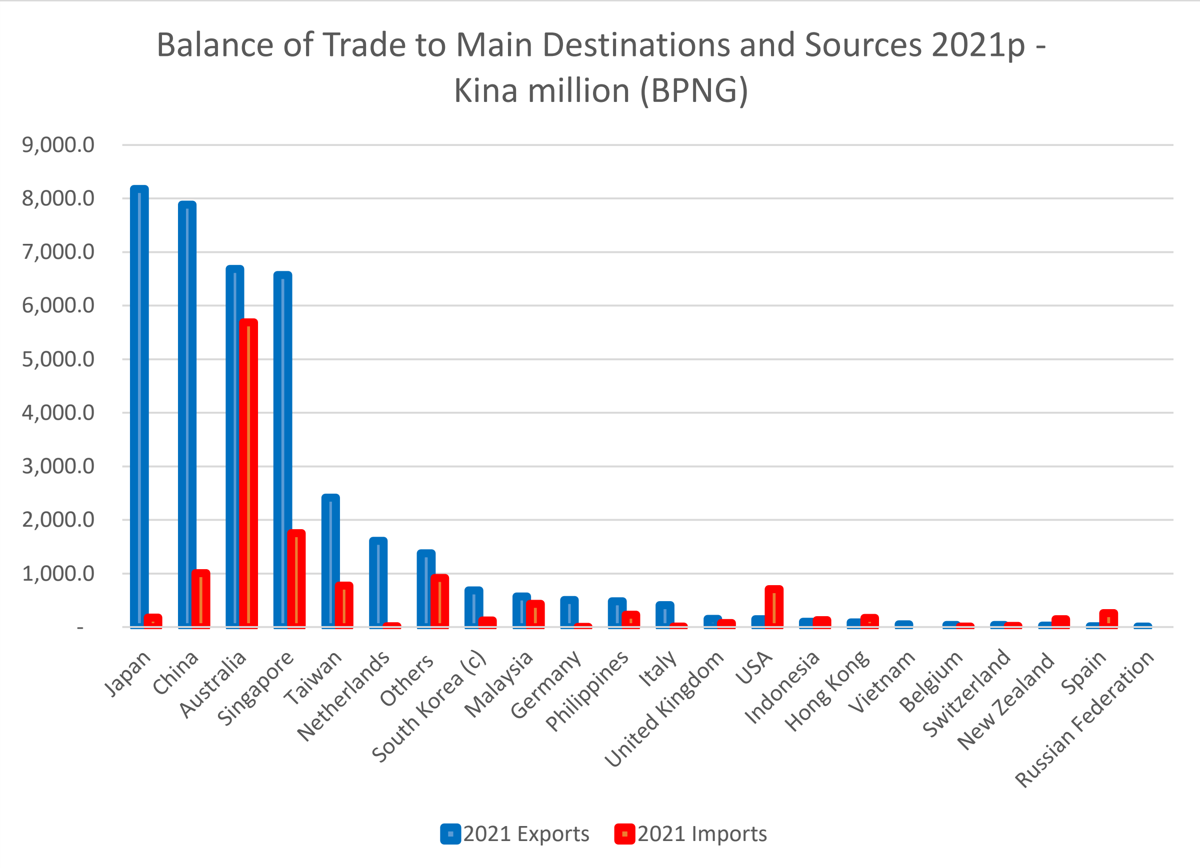

Exports -Value FOB (million kina) 1999-2021 (BPNG)
16,000.0
14,000.0
12,000.0
10,000.0
8,000.0
6,000.0
4,000.0
2,000.0
-
1999
2001
2003
2005
2007
2009
2011
2013
2015
2017
2019
2021p
year
Total Agriculture (excl. forestry/fisheries)
Total forest products
Marine Products
Crude Oil
Gold
Copper
Nickel
Cobalt
Condensate
Gas (LNG)



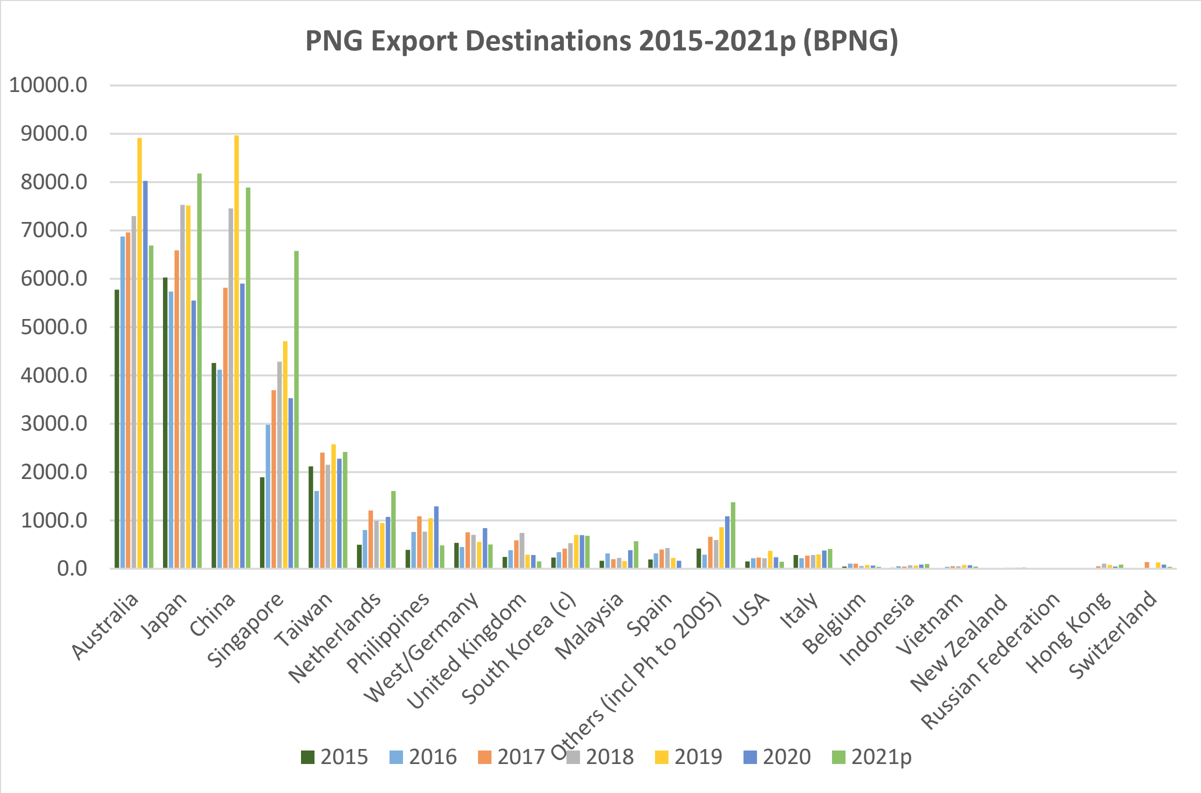
% of Total PNG Exports - by Value 2001-2021p (BPNG) -
Percentage
50.00
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
-
2001
2003
2005
2007
2009
2011
2013
2015
2017
2019
2021
Condensate
Gas (LNG)
Crude Oil
Total Agriculture (excl. forestry/fisheries)
Total forest products
Marine Products
Gold
Copper



Balance of Trade to Main Destinations and Sources 2020 - Kina mill (source BPNG)
9,000.0
8,000.0
7,000.0
6,000.0
5,000.0
4,000.0
3,000.0
2,000.0
1,000.0
-
Australia
China
Japan
Singapore
Taiwan
Philippines
Others
Netherlands
Germany
South Korea (c)
Italy
Malaysia
United Kingdom
USA
Spain
Switzerland
Indonesia
Vietnam
Belgium
Hong Kong
New Zealand
Russian Federation
2020 Exports
2020 Imports

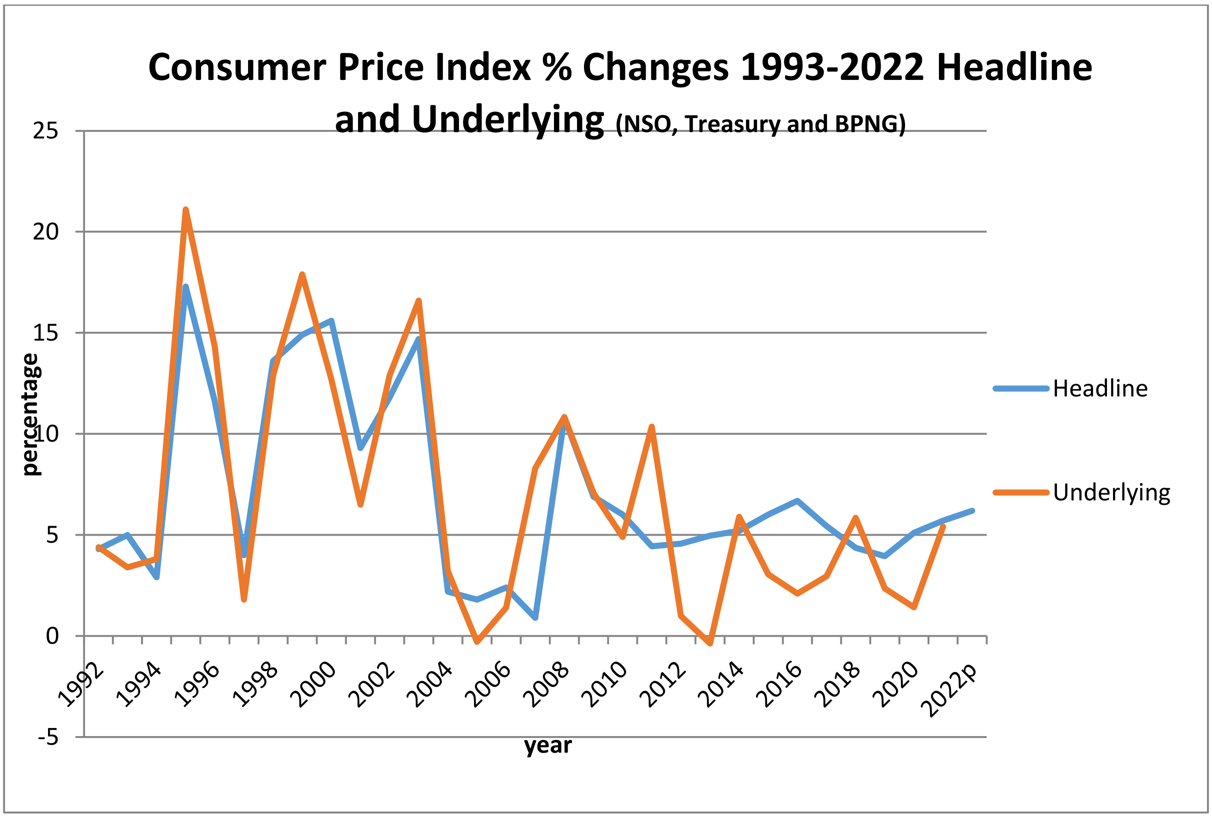


Balance of Trade to Main Destinations and Sources 2021p - Kina million (BPNG)
9,000.0
8,000.0
7,000.0
6,000.0
5,000.0
4,000.0
3,000.0
2,000.0
1,000.0
-
Japan
China
Australia
Singapore
Taiwan
Netherlands
Others
South Korea (c)
Malaysia
Germany
Philippines
Italy
United Kingdom
USA
Indonesia
Hong Kong
Vietnam
Belgium
Switzerland
New Zealand
Spain
Russian Federation
2021 Exports
2021 Imports

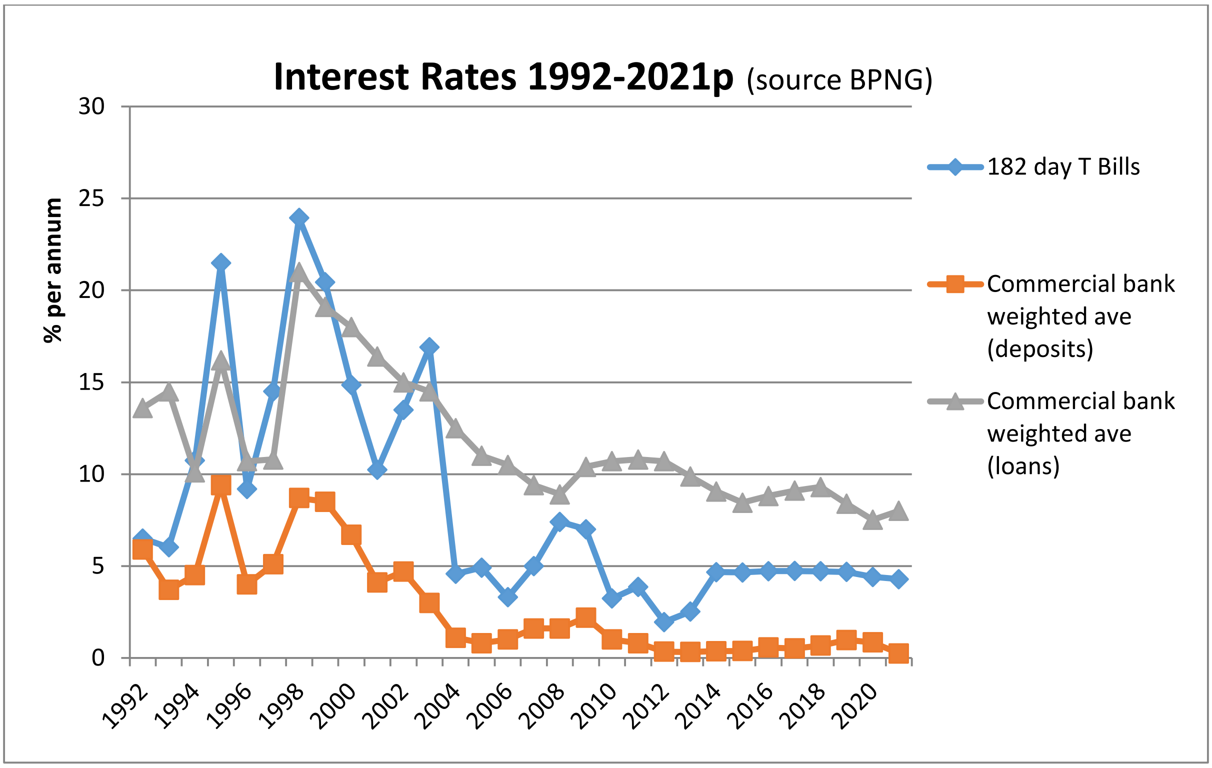


Economic Indicators and conditions for more sustainable development

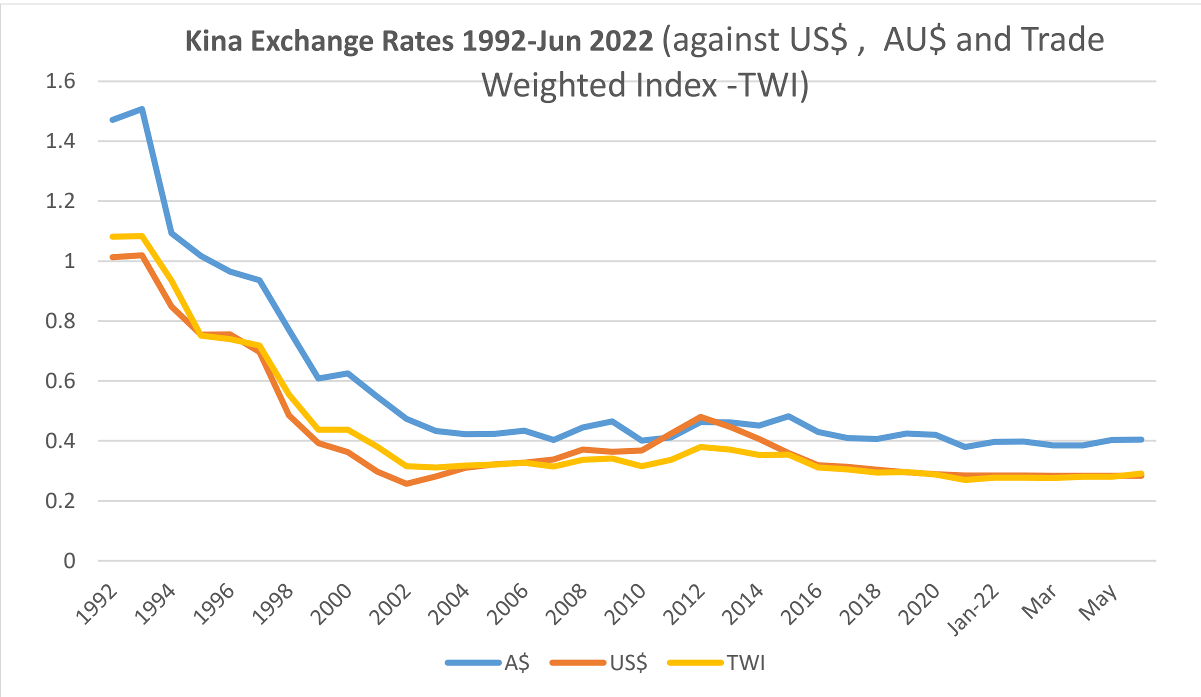
Inflation:



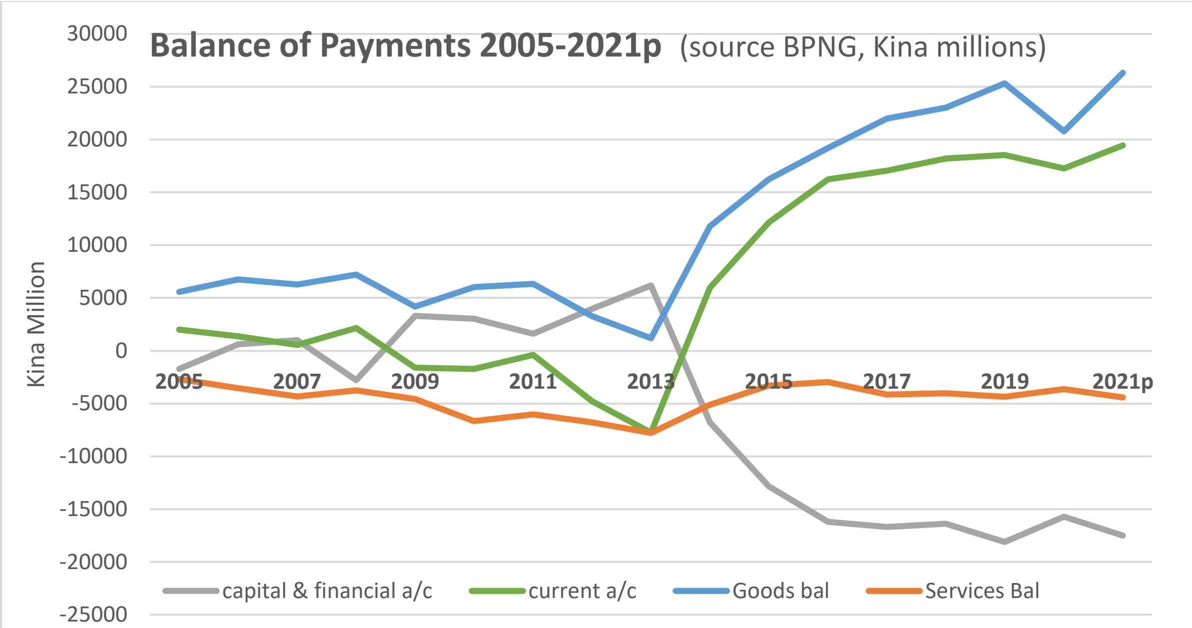
Interest rates:

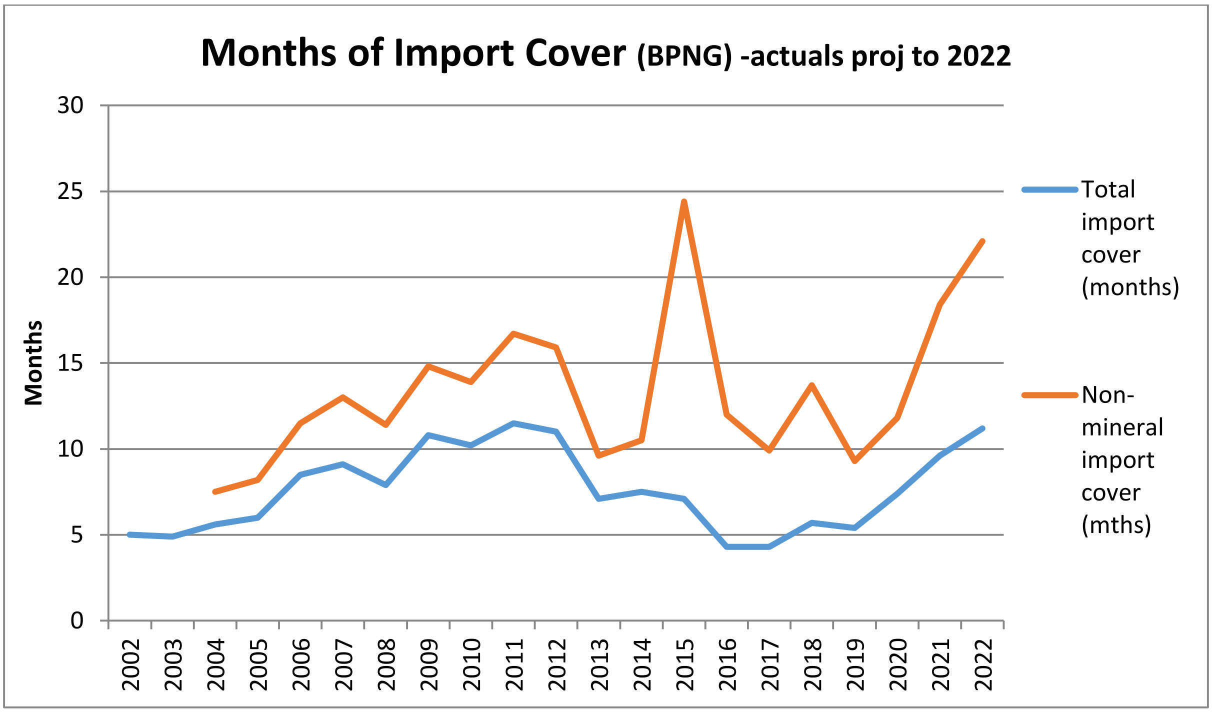


The kina exchange rate:

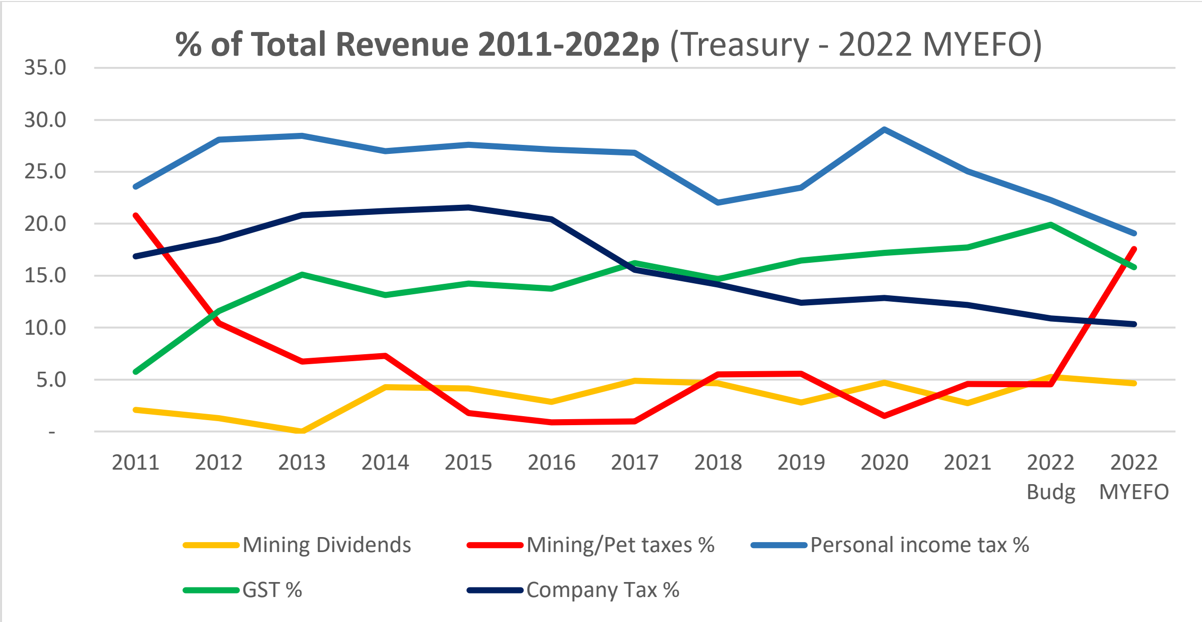


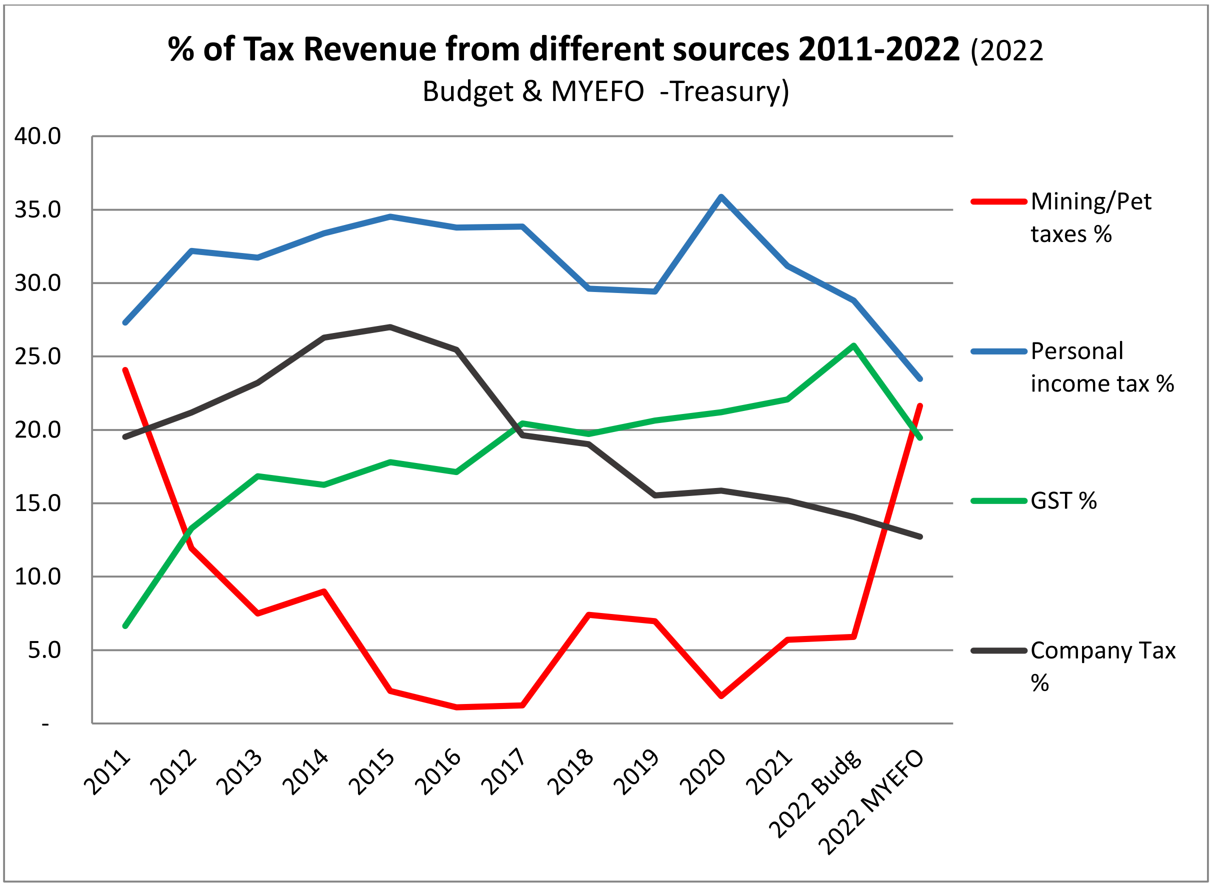
Balance of Payments:

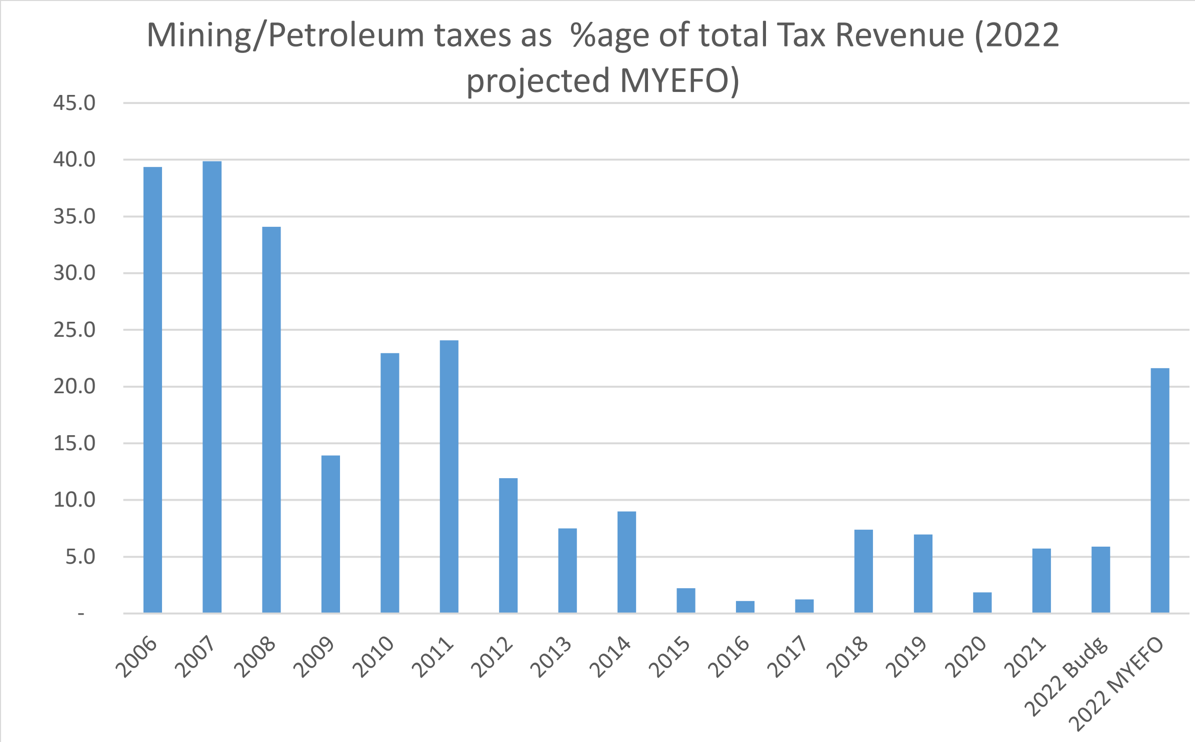


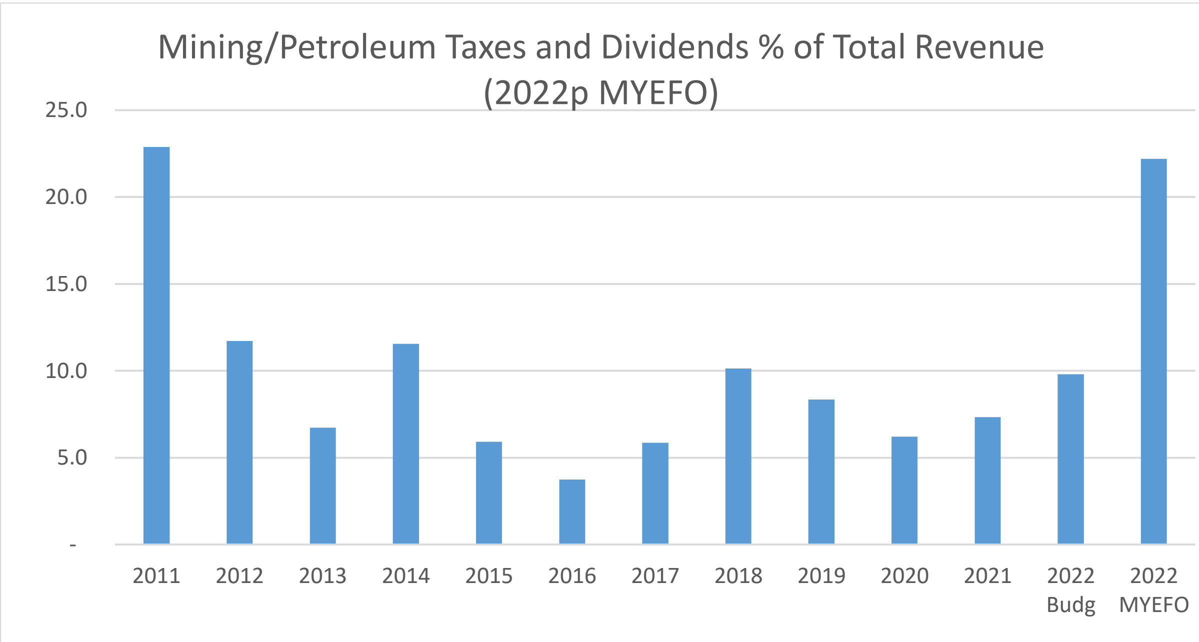


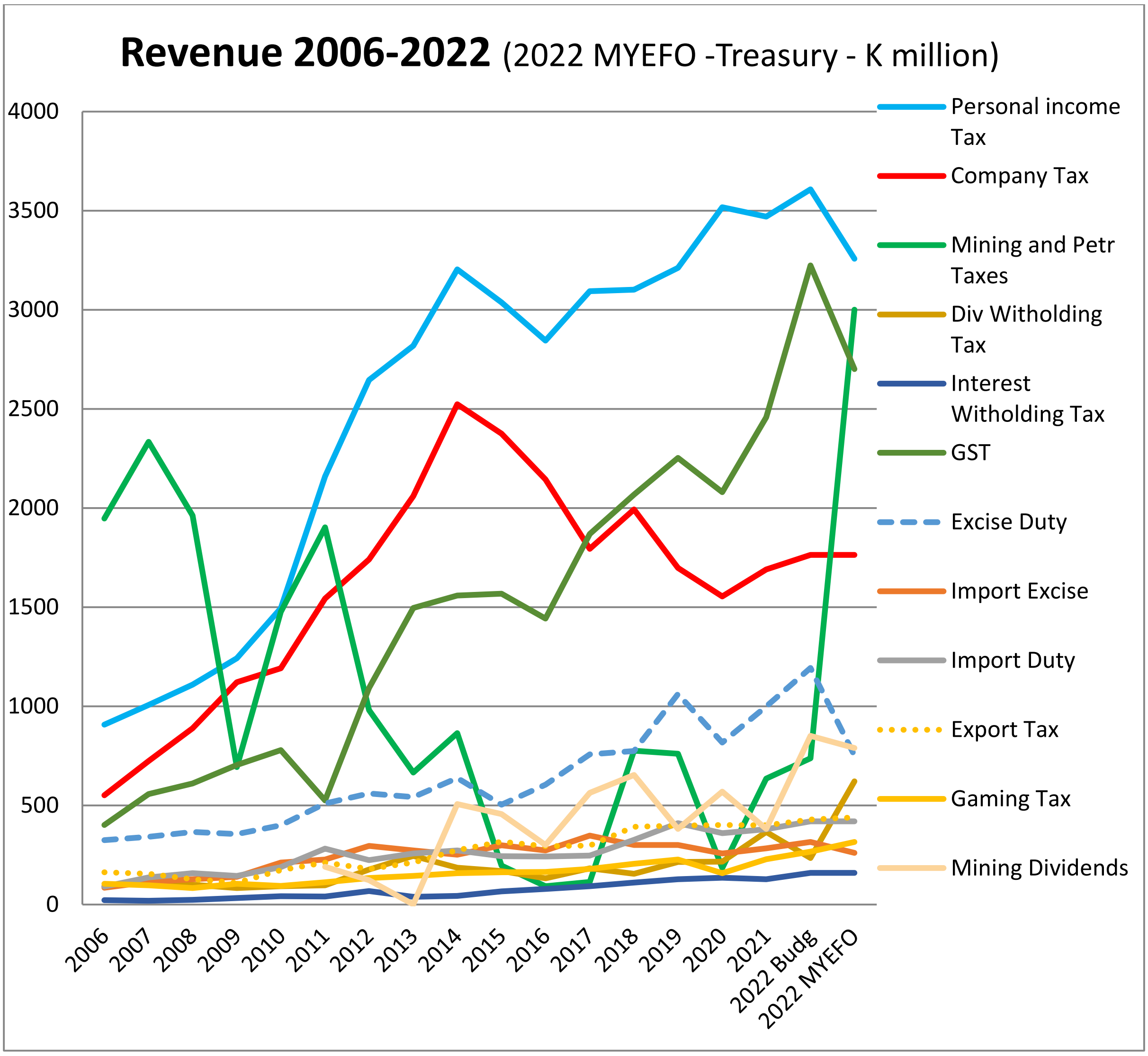
Fiscal Management:


% of Total Revenue 2011-2022p (Treasury - 2022 MYEFO)
35.0
30.0
25.0
20.0
15.0
10.0
5.0
-
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022 Budg
2022 MYEFO
Mining Dividends
Mining/Pet taxes %
Personal income tax %
GST %
Company Tax %

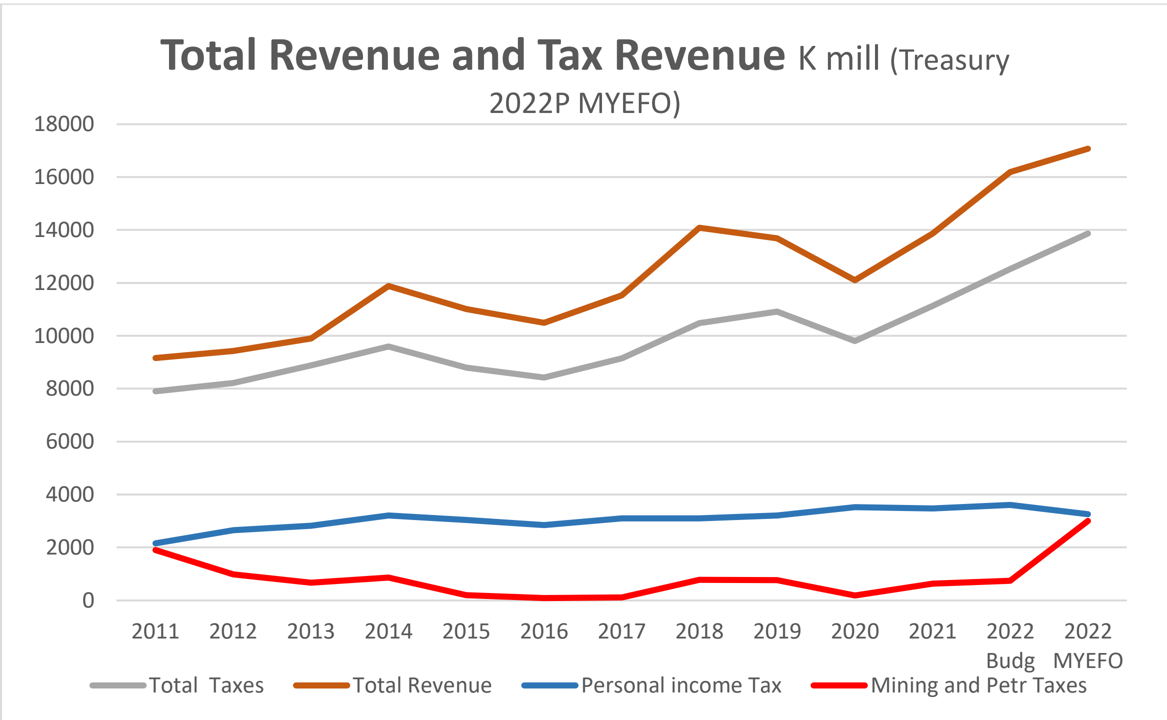

% of Tax Revenue from different sources 2011-2022 (2022 Budget & MYEFO -Treasury)
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
-
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022 Budg
2022 MYEFO
Mining/Pet taxes %
Personal income tax %
GST %
Company Tax %


Mining/Petroleum taxes as %age of total Tax Revenue (2022 projected MYEFO)
45.0
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
-
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022 Budg
2022 MYEFO

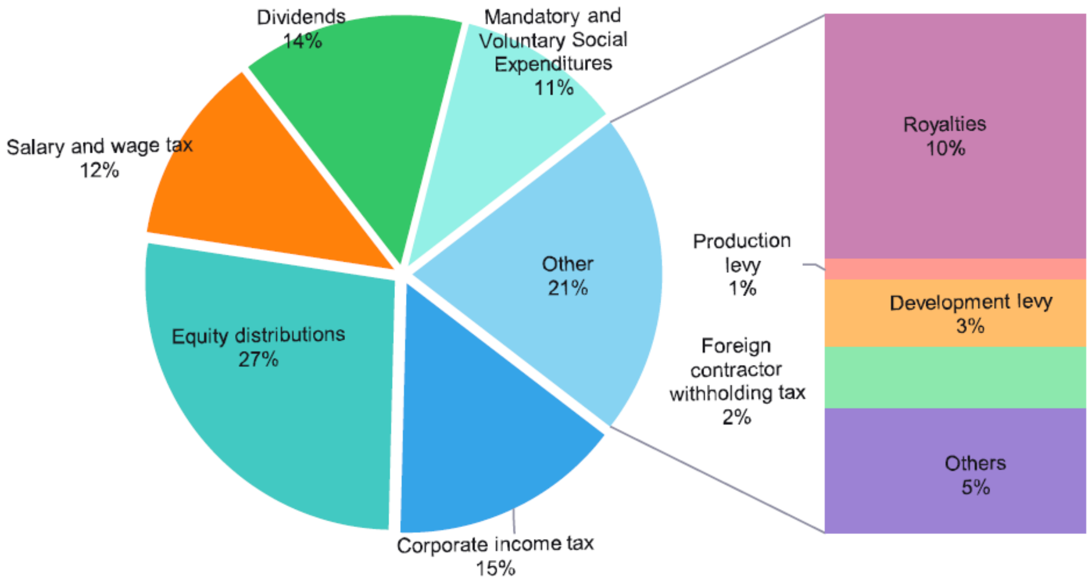

Mining/Petroleum Taxes and Dividends % of Total Revenue (2022p MYEFO)
25.0
20.0
15.0
10.0
5.0
-
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022 Budg
2022 MYEFO



Revenue 2006-2022 (2022 MYEFO -Treasury - K million)
4000
3500
3000
2500
2000
1500
1000
500
0
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022 Budg
2022 MYEFO
Personal income Tax
Company Tax
Mining and Petr Taxes
Div Witholding Tax
Interest Witholding Tax
GST
Excise Duty
Import Excise
Import Duty
Export Tax
Gaming Tax
Mining Dividends



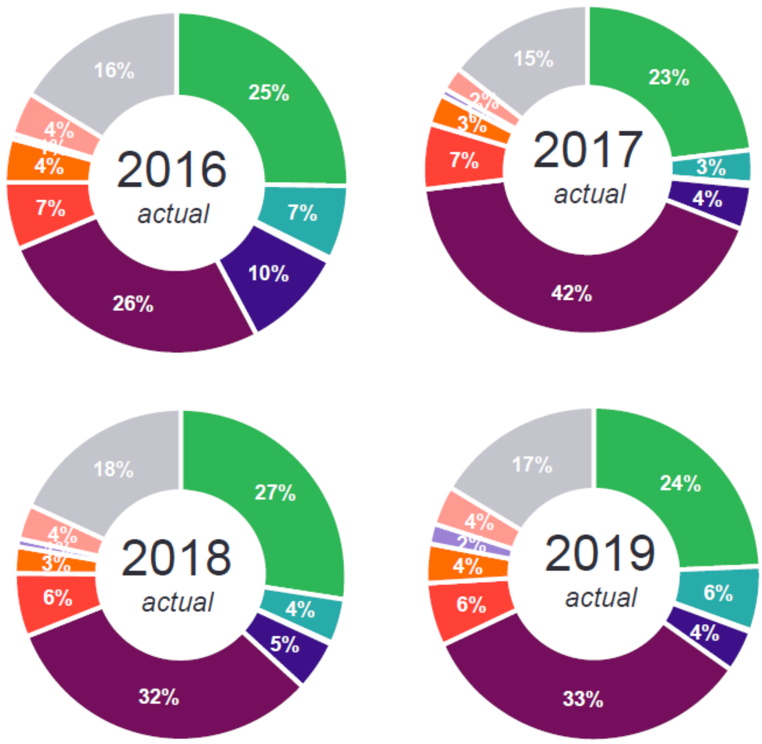
Total Revenue and Tax Revenue K mill (Treasury 2022P MYEFO)
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022 Budg
2022 MYEFO
Total Taxes
Total Revenue
Personal income Tax
Mining and Petr Taxes



Revenue Streams received by the State from the Extractive Industries for 2019. (from the EITI 2019 Report for Papua New Guinea)

Extractive industry in PNG

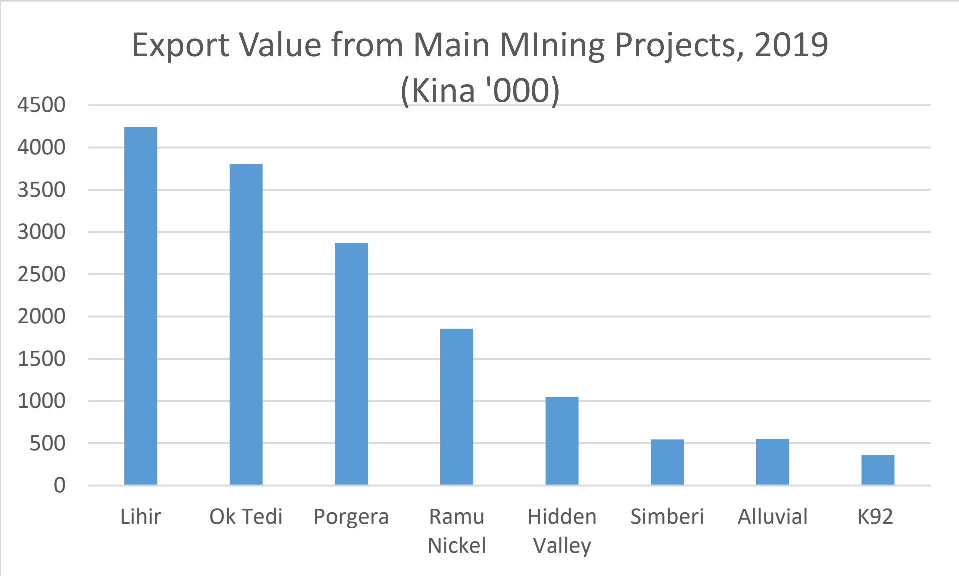
Year	Value of Oil and gas and mineral exports (PGK million)
2013	10,607
2014	18,088
2015	19,932
2016	20,885
2017	26,286
2018	28,766
2019	33,530

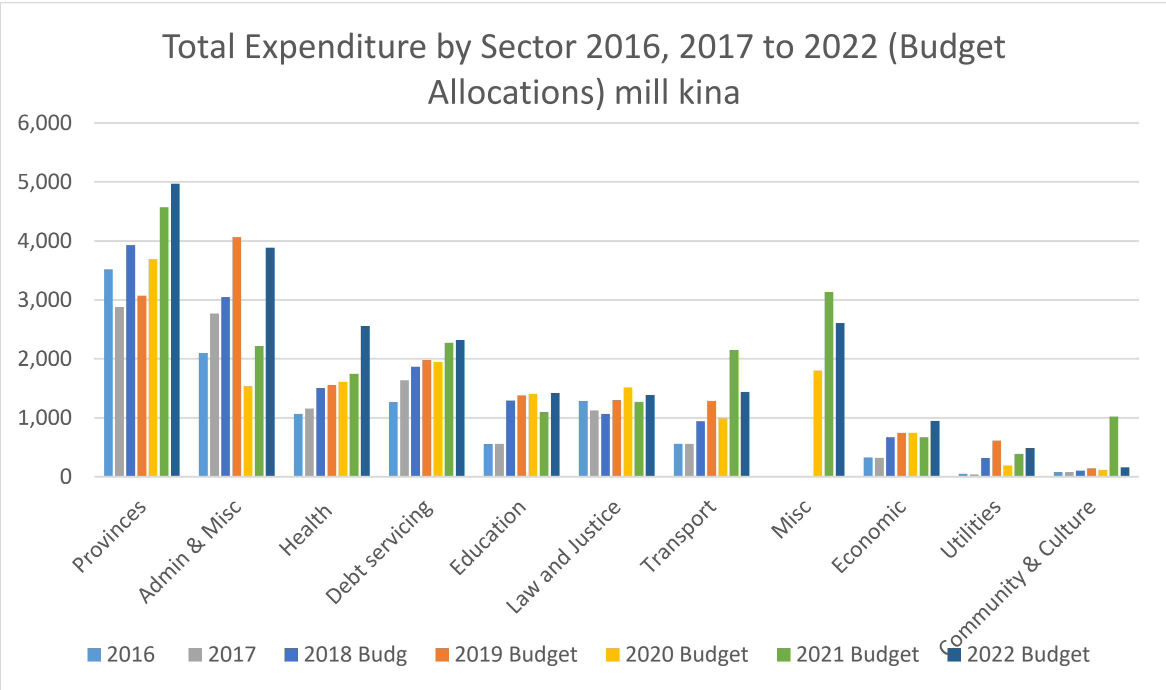


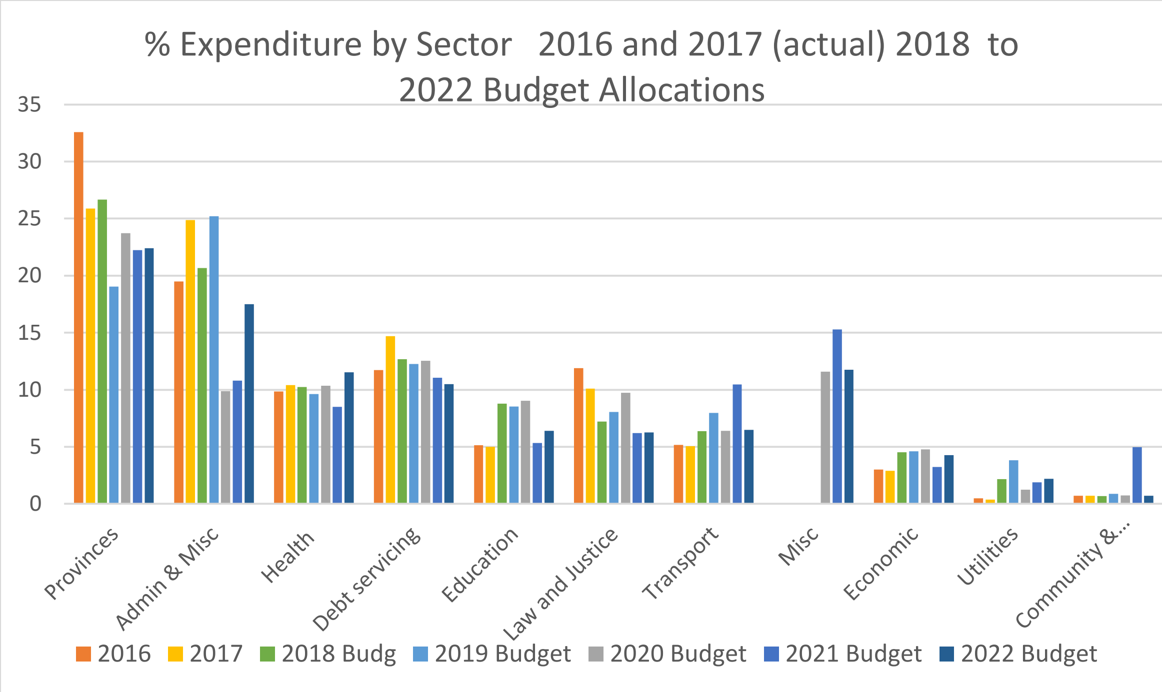
Legend:

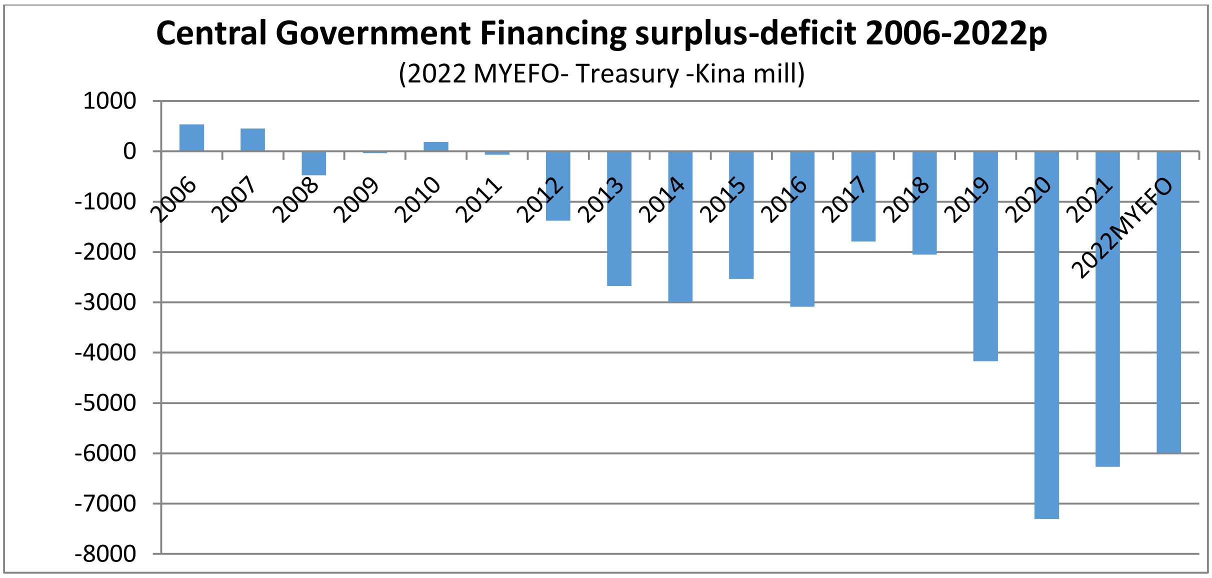
Gold	Condensate	Non-mineral exports
Copper	Nickel	*Silver comprises 0.2% and is not shown on the charts*
Oil	Cobalt	
LNG	Refined Petroleum Products	

Extractive Industry in PNG – contribution to Export (from the EITI Report 2019)

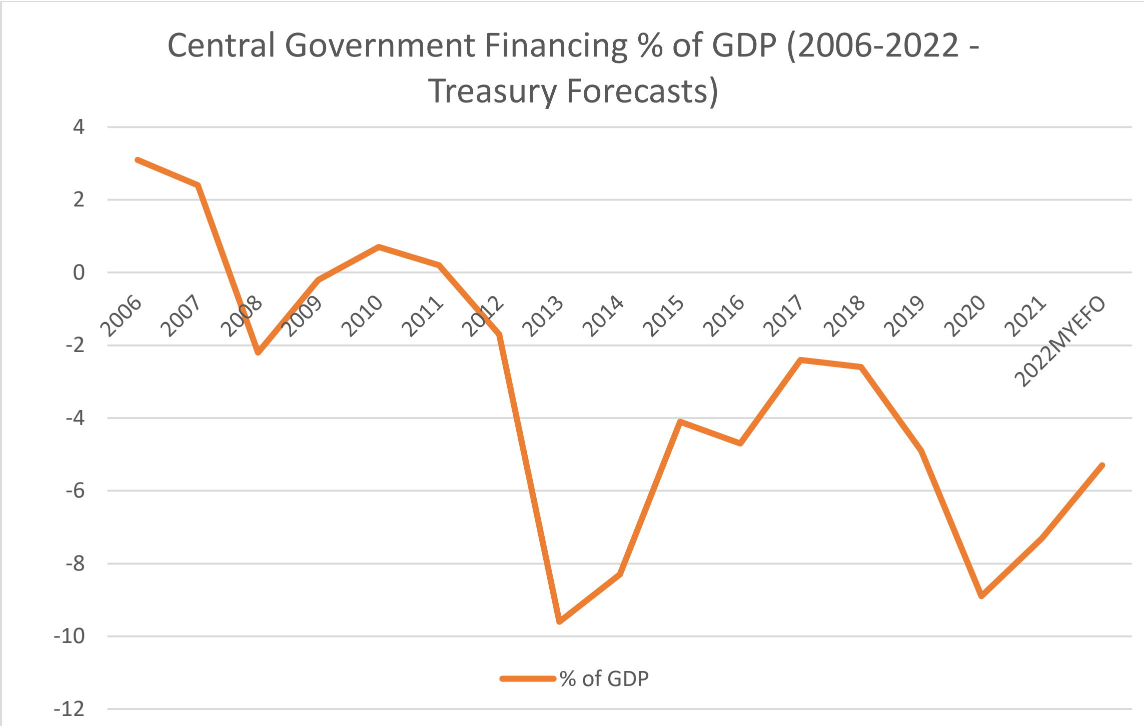




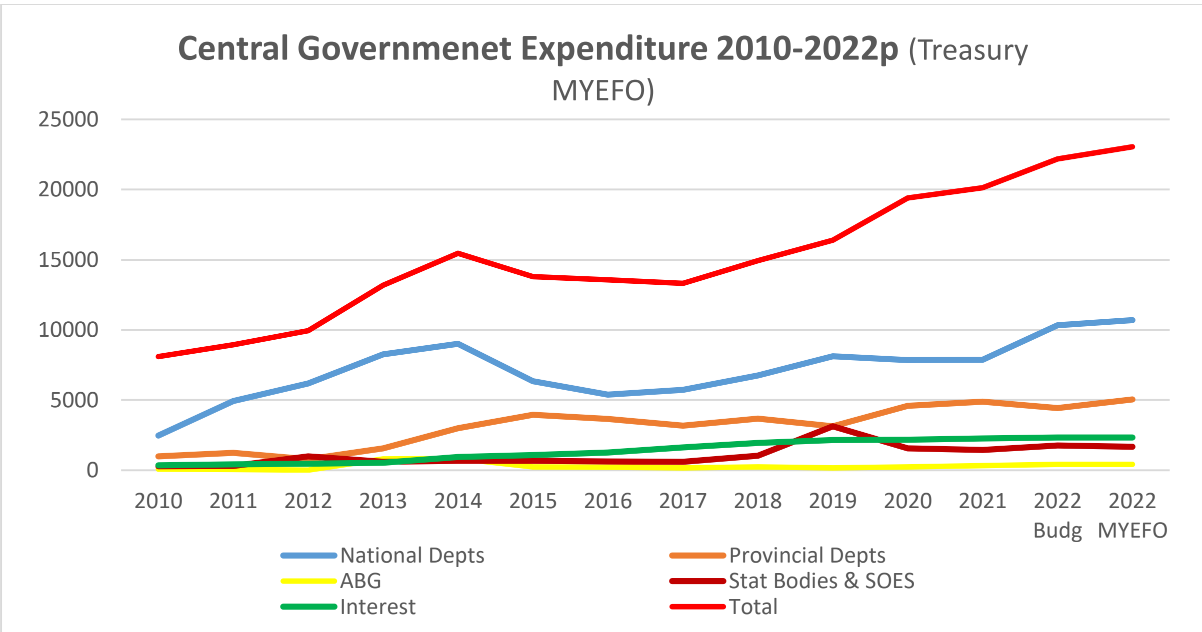

% Expenditure by Sector 2016 and 2017 (actual) 2018 to 2022 Budget Allocations
35
30
25
20
15
10
5
0
Provinces
Admin & Misc
Health
Debt servicing
Education
Law and Justice
Transport
Misc
Economic
Utilities
Community &...
2016
2017
2018 Budg
2019 Budget
2020 Budget
2021 Budget
2022 Budget


Central Government Financing surplus-deficit 2006-2022p
(2022 MYEFO- Treasury -Kina mill)
1000
0
-1000
-2000
-3000
-4000
-5000
-6000
-7000
-8000
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022MYEFO

Wealth Fund.

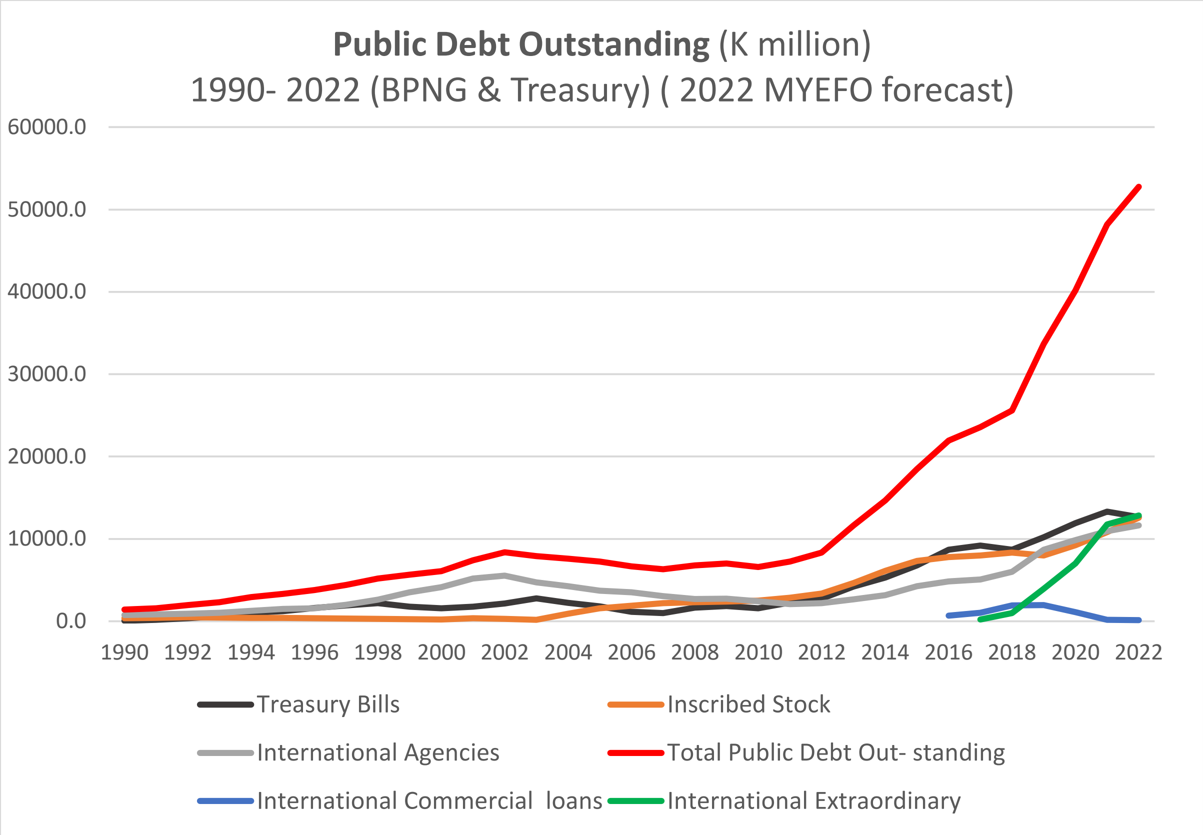


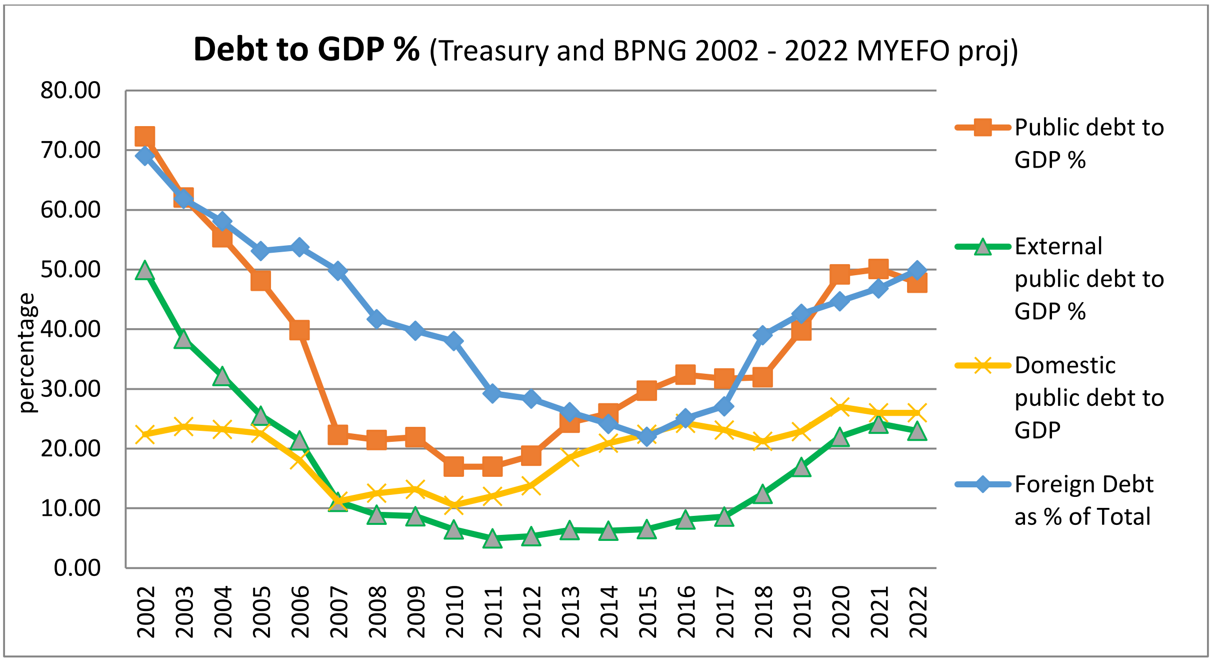
Central Government Financing % of GDP (2006-2022 - Treasury Forecasts)
4
2
0
-2
-4
-6
-8
-10
-12
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022MYEFO
% of GDP



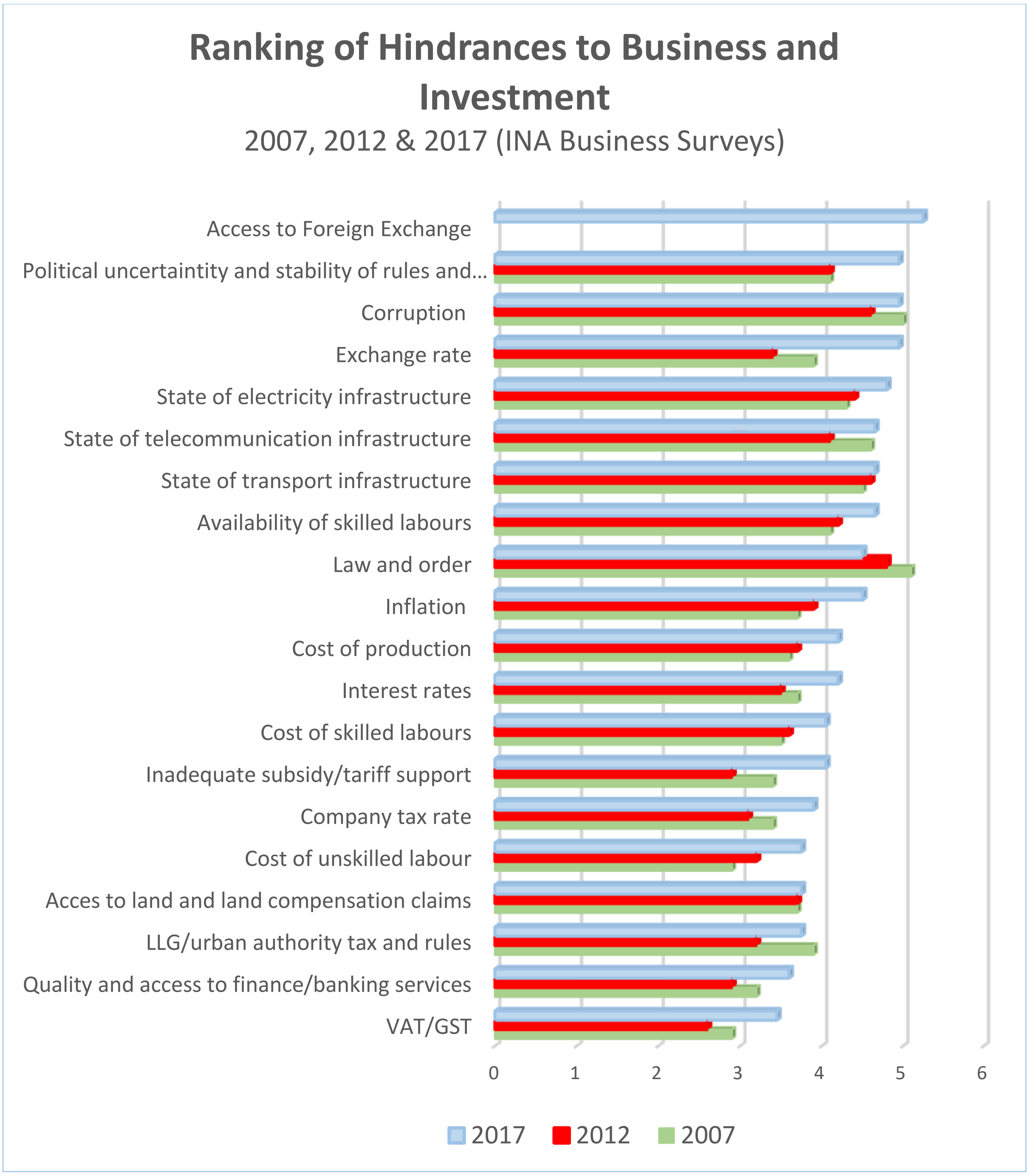
Central Governmenet Expenditure 2010-2022p (Treasury MYEFO)
25000
20000
15000
10000
5000
0
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022 Budg
2022 MYEFO
National Depts
Provincial Depts
ABG
Stat Bodies & SOES
Interest
Total

Debt:





Investment Conditions and Mechanisms for Addressing Industry Issues:


Ranking of Hindrances to Business and Investment
2007, 2012 & 2017 (INA Business Surveys)
Access to Foreign Exchange
Political uncertaintity and stability of rules and...
Corruption
Exchange rate
State of electricity infrastructure
State of telecommunication infrastructure
State of transport infrastructure
Availability of skilled labours
Law and order
Inflation
Cost of production
Interest rates
Cost of skilled labours
Inadequate subsidy/tariff support
Company tax rate
Cost of unskilled labour
Acces to land and land compensation claims
LLG/urban authority tax and rules
Quality and access to finance/banking services
VAT/GST
0
1
2
3
4
5
6
2017
2012
2007