Appendices

A. Tables

	Stabilization funds	Saving funds
Investment horizon	Short term	Long term
Asset composition	Limited to highly liquid assets	Broader asset classes
Currency composition	Negatively correlated with commodity prices	Matching net import of the country
Performance benchmarks	Minimizing expenditure volatility and maintaining adequate liquidity	Achieving real expected returns for long-term periods to maintain the long-term purchasing of the wealth
Risk tolerance	Low risk-return profile	Active investment management with higher risk-return profile
Asset and liability management	Ensuring the sustainability of future fiscal expenditure	Maximizing net value of the fund taken into account the correlation between asset prices and liabilities

Source: IMF.

Table 1 – Asset Allocation Characteristics of Stabilization and Savings SWFS (Source: *IMF*)

	Growth rate (in %)	
Commodity	**20 Year**	**5 Year**
Lithium	6,54%	-1,81%
Rare earths	4,01%	1,59%
Average for minerals	2,59%	0,85%

Table 2 – Mineral growth rate average
(Source: *U.S. Bureau of Mines and U.S. Geological Survey Minerals Yearbook*)

Country producer	Country not producer (but similar)
Argentina	Uruguay
Australia	New Zealand
Brazil	Colombia
Chile	Paraguay
China	Japan
Portugal	Romania
Malaysia	Philippines
Zimbabwe	Mozambique

Table 3 – Country producer and country not producer used in our model

```
        Hausman Test

data:  lGDPpc ~ LIprod + REEprod + LIANDREE + LIORREE + EXP
+ CONS +  ...
chisq = 20.898, df = 8, p-value = 0.007424
alternative hypothesis: one model is inconsistent
```

Hausman test for the lGDPpc model

```
        Hausman Test

data:  FDI ~ LIprod + REEprod + LIANDREE + LIORREE + price98LI + price98REE +  ...
chisq = 11.009, df = 8, p-value = 0.2012
alternative hypothesis: one model is inconsistent
```

Hausman test for the EXP model

```
        Hausman Test

data:  FDI ~ LIprod + REEprod + LIANDREE + LIORREE + price98LI + price98REE +  ...
chisq = 11.009, df = 8, p-value = 0.2012
alternative hypothesis: one model is inconsistent
```

Hausman test for the FDI model

```
        Hausman Test

data:  CONS ~ LIprod + REEprod + LIANDREE + LIORREE + price98LI + price98REE +  ...
chisq = 0.15697, df = 8, p-value = 1
alternative hypothesis: one model is inconsistent
```

Hausman test for the CONS model

Table 4 – The Hausman Tests

```
        Lagrange Multiplier Test - time effects
        (Breusch-Pagan) for balanced panels

data:  lGDPpc ~ LIprod + REEprod + LIANDREE + LIORREE + EXP
+ CONS +  ...
chisq = 41.605, df = 1, p-value = 1.117e-10
alternative hypothesis: significant effects
```

Table 5 – Time effects test for balanced panels

```
        F test for individual effects

data:  lGDPpc ~ LIprod + REEprod + LIANDREE + LIORREE + EXP
+ CONS +  ...
F = 60.544, df1 = 14, df2 = 234, p-value < 2.2e-16
alternative hypothesis: significant effects
```

Table 6 – F test for individual effects

B. Figures

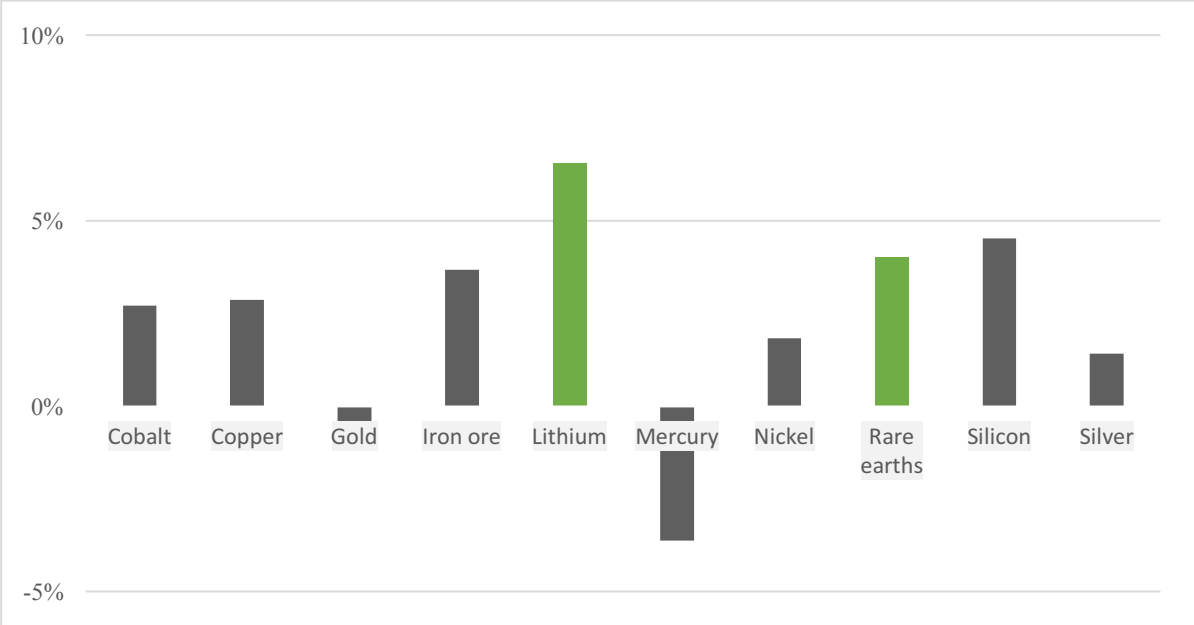

Figure 1 – Mineral growth rate by type the last 20 years (in %)
(Source: *U.S. Bureau of Mines and U.S. Geological Survey Minerals Yearbook*)

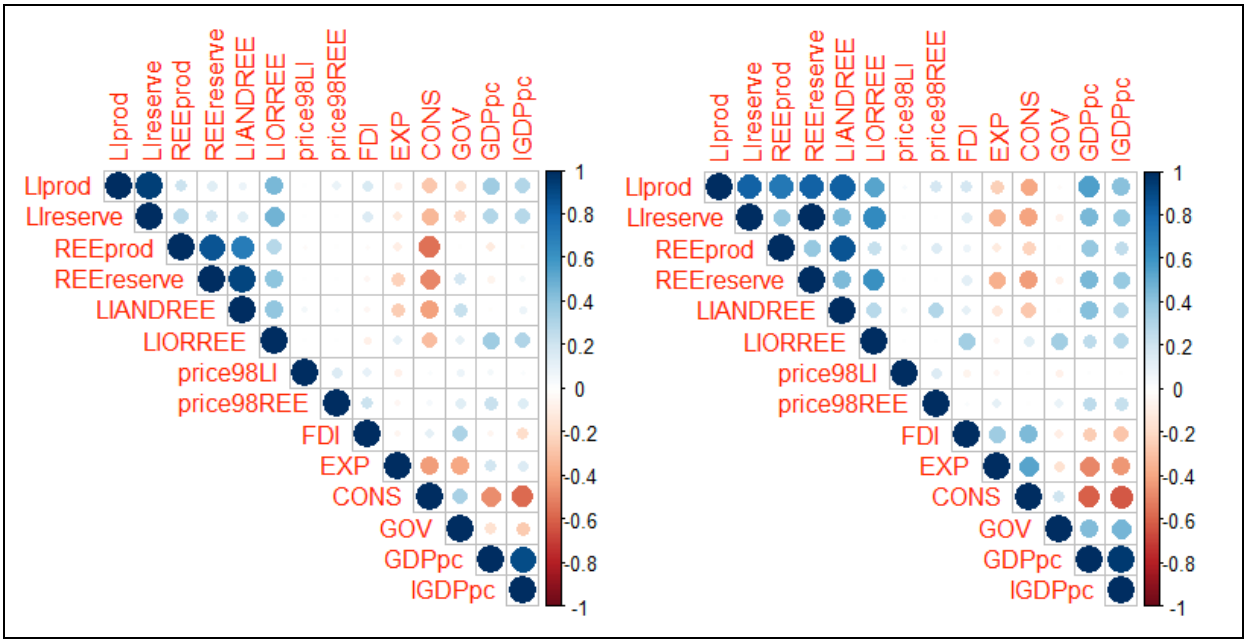

Figure 2 – Correlagram of all variables by country types (underdeveloped country on the left and developing country on the right)

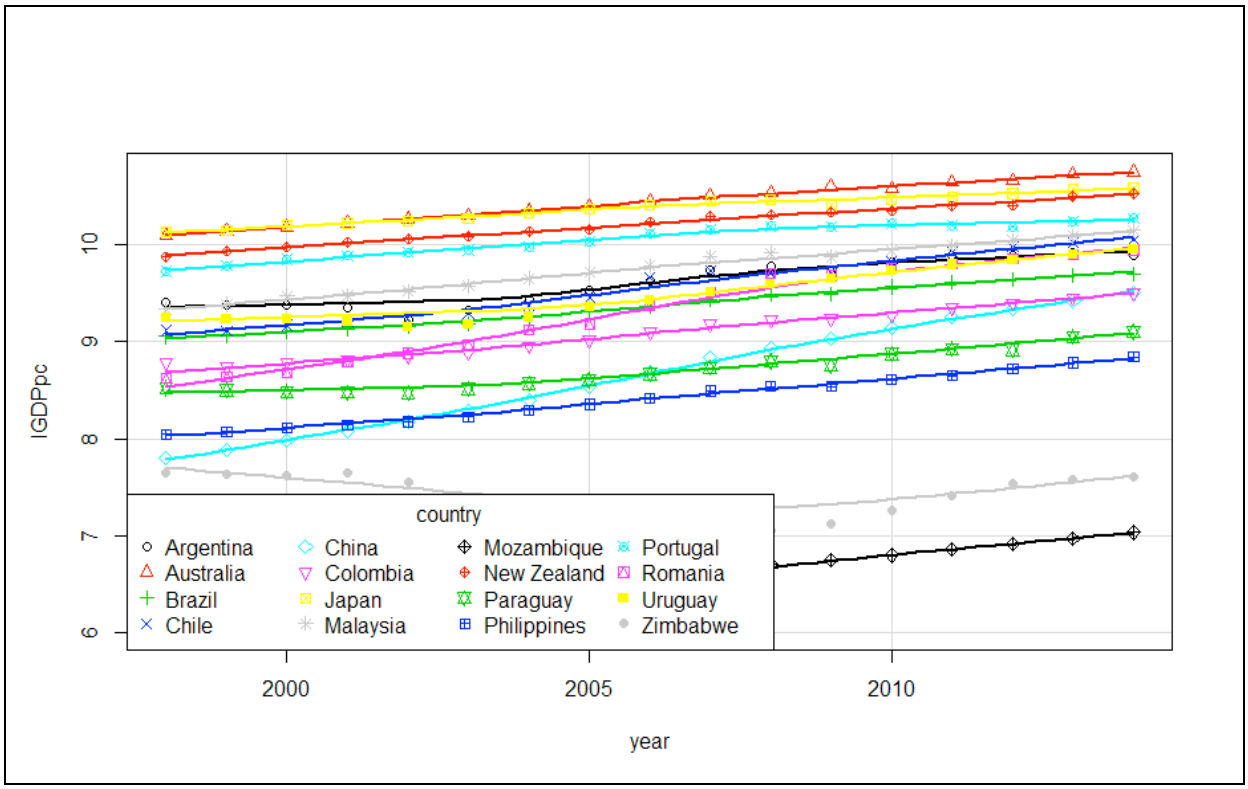

Figure 3 – Plot of the evolution of lGDPpc from 1998-2014

Figure 4 – Plot of the evolution of lGDPpc for lithium and/or REE country-producer from 1998-2014 (graphs by country)