Appendices

12.11-2020

1 Appendices

1.1 Appendix A

Notes: This table includes summary statistics for main variables used in our research. Statistics include mean, standard deviation„ min, 1st quartile, median, 3rd quartile, max & number of valid data points. In Panel A, different YIV data is summarized. In Panel B, we have listed the main dependent variables which are used for predictions. GDP denotes the year-on-year growth rate(quarterly data), CON denotes YOY consumption growth(monthly data), EMP describes YOY growth rate for non-farm payroll and lastly IND stands for Industrial production YOY growth (monthly data). In Panel C, different control variables are listed: SVEN1F01 - 1 year treasury bond par yield.

Table 1.1: Summary Statistics

	Mean	Std.Dev	Min	Q1	Median	Q3	Max	N.Valid
Panel A: YIV								
YIV	3.34	1.31	1.39	2.60	3.00	3.62	9.21	103
Panel B: Dependent Variables								
GDP	2.50	1.78	-3.92	1.71	2.61	3.98	5.30	103
CON	4.88	1.95	-3.03	3.92	5.11	6.22	9.02	312
EMP	1.07	1.67	-5.00	0.20	1.60	2.20	3.50	312
IND	2.00	4.05	-15.33	1.19	2.74	4.16	8.54	312
Panel C: Control Variables								
SVEN1F01	3.89	2.40	0.21	1.38	4.35	5.88	9.29	6486
VIX	19.83	7.64	10.82	14.20	17.76	23.54	62.64	312
HOUSNG	1.01	18.36	-54.80	-7.25	2.80	12.70	50.00	312

Note:
Additional control variables will be added upon construction. Furthermore, currently the frequency of the datasets differs for different variables but this will be addressed in the research process.

1.2 Appendix B.

Notes: This table includes regression using GDP & YIV. Controls will be added during research process. The equation for the regression is the following:

$$\sum_{j=1}^{j=H} log(1 + GDP_{i,t+j})/H = \alpha_H + \beta_H \sigma_{IV,t}^{INT} + Controls + \varepsilon_{t+H} \tag{1}$$

Table 1.2: Regression output

	log_gdp
Panel A: YIV	
R-Squared	42.41
R-Squared (adj.)	41.26
Intercept	4.13
Beta.(Intercept)	0.4
Beta.YIV	0.12
Beta.dum	0.49
t-statistic	-3.51
p-value	0.4
newey.(Intercept)	-0.23
newey.YIV	0.08
newey.dum	0
Significance	NA

Note:

*** - p>0.01, ** - p>0.05, * - p>0.1
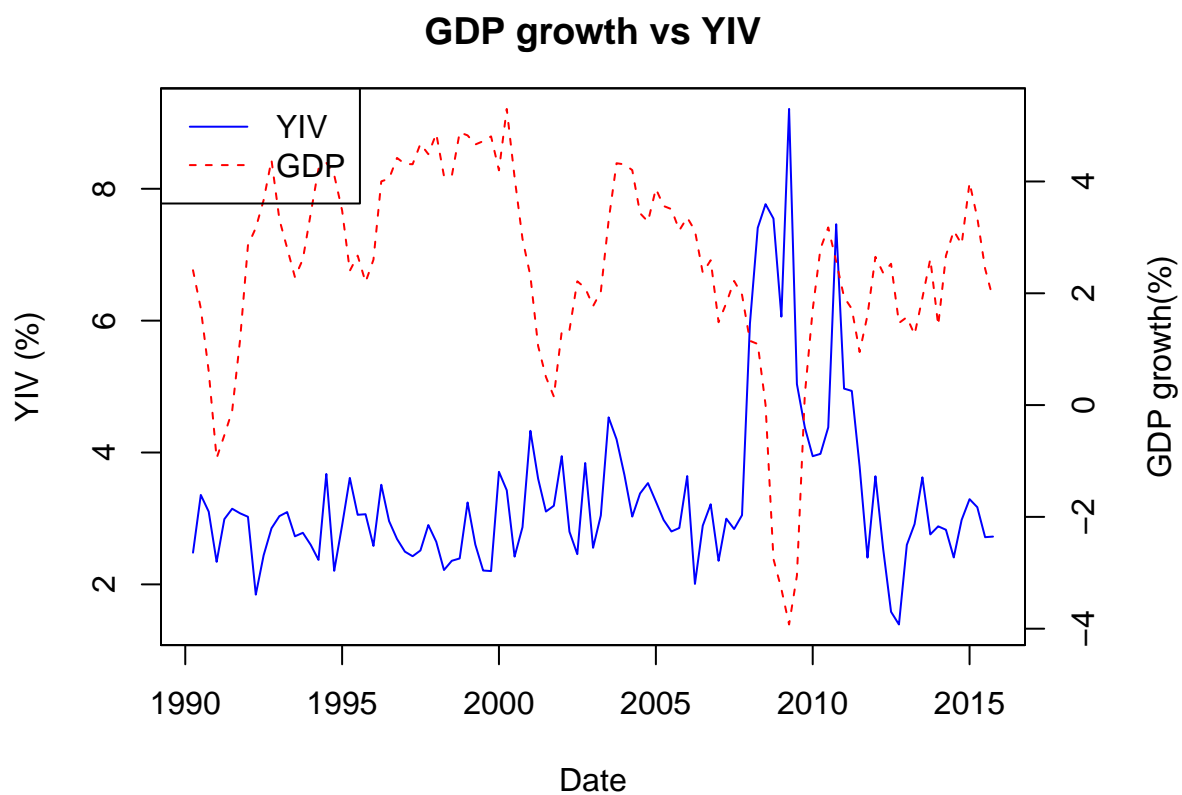
1.3   Appendix C

GDP growth vs YIV

Figure 1.1: GDP Growth(%) vs 5-year Treasury Implied Volatility