

Appendix

Tests for determining the number of lags in the VAR model

VAR Lag Order Selection Criteria

Endogenous variables: SRVICES REER BALANCE__GOODS_AND_01
GDP_INDEX

Exogenous variables: C

Sample: 2000Q1 2020Q3

Included observations: 81

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-1282.695	NA	7.37e+08	31.77023	31.88848	31.81768
1	-1137.571	272.3304	30435555	28.58200	29.17322*	28.81921
2	-1104.583	58.64516*	20069751*	28.16255*	29.22675	28.58952*

* indicates lag order selected by the criterion

LR: sequential modified LR test statistic (each test at 5% level)

FPE: Final prediction error

AIC: Akaike information criterion

SC: Schwarz information criterion

HQ: Hannan-Quinn information criterion

VAR model stability test

Roots of Characteristic Polynomial

Endogenous variables: SERVICES REER
BALANCE__GOODS_AND_01 GDP_INDEX

Exogenous variables: C

Lag specification: 1 2

Root	Modulus
0.902658 - 0.079012i	0.906110
0.902658 + 0.079012i	0.906110
-0.033500 - 0.787107i	0.787820
-0.033500 + 0.787107i	0.787820
-0.267805 - 0.273501i	0.382782
-0.267805 + 0.273501i	0.382782
0.122010 - 0.227853i	0.258464
0.122010 + 0.227853i	0.258464

No root lies outside the unit circle.

VAR satisfies the stability condition.

VAR model estimations

Vector Autoregression Estimates

Sample (adjusted): 2000Q3 2020Q3

Included observations: 81 after adjustments

Standard errors in () & t-statistics in []

	SERVICES	REER	BALANCE_G OODS_AND_01	GDP_INDEX
SERVICES (-1)	-0.084678 (0.11706) [-0.72335]	0.000401 (0.00067) [0.59779]	-0.006034 (0.00826) [-0.73054]	-0.002708 (0.00186) [-1.45304]
SERVICES (-2)	-0.024653 (0.11856) [-0.20794]	0.000375 (0.00068) [0.55124]	-0.006789 (0.00836) [-0.81158]	0.000783 (0.00189) [0.41466]
REER(-1)	45.48664 (19.6685) [2.31267]	0.928169 (0.11274) [8.23257]	1.887120 (1.38767) [1.35992]	0.403815 (0.31309) [1.28976]
REER(-2)	-29.10933 (19.0643) [-1.52690]	-0.001111 (0.10928) [-0.01017]	-2.485196 (1.34505) [-1.84766]	-0.505683 (0.30348) [-1.66630]
BALANCE_GOODS_AND _01(-1)	0.581531 (1.34419) [0.43263]	-0.024571 (0.00771) [-3.18890]	-0.148716 (0.09484) [-1.56813]	0.008117 (0.02140) [0.37934]
BALANCE_GOODS_AND _01(-2)	1.007478 (1.42032) [0.70933]	-0.012251 (0.00814) [-1.50478]	-0.530607 (0.10021) [-5.29507]	0.000572 (0.02261) [0.02530]
GDP_INDEX(-1)	-9.193688 (7.31417) [-1.25697]	-0.088642 (0.04193) [-2.11423]	-0.252940 (0.51604) [-0.49016]	0.751953 (0.11643) [6.45836]
GDP_INDEX(-2)	11.64497 (8.90637) [1.30749]	0.121906 (0.05105) [2.38784]	-1.252574 (0.62837) [-1.99336]	0.022867 (0.14178) [0.16129]
C	-1695.659 (1054.56) [-1.60792]	3.354719 (6.04497) [0.55496]	203.0031 (74.4028) [2.72843]	32.70531 (16.7871) [1.94824]
R-squared	0.140356	0.935617	0.422032	0.654639
Adj. R-squared	0.044840	0.928463	0.357813	0.616266
Sum sq. resids	1782634.	58.57397	8873.487	451.7200
S.E. equation	157.3493	0.901957	11.10148	2.504773
F-statistic	1.469454	130.7884	6.571784	17.05971
Log likelihood	-519.8997	-101.8056	-305.1372	-184.5379
Akaike AIC	13.05925	2.735940	7.756473	4.778713
Schwarz SC	13.32530	3.001990	8.022523	5.044762
Mean dependent	102.4624	95.53988	-5.110552	101.6252
S.D. dependent	161.0004	3.372265	13.85320	4.043460
Determinant resid covariance (dof adj.)		13167763		
Determinant resid covariance		8220570.		
Log likelihood		-1104.583		
Akaike information criterion		28.16255		
Schwarz criterion		29.22675		