



Programa de  
**Aperfeiçoamento**  
para Carreiras

# Equilíbrio Geral Computável

2018

contBOT	0.0048	Contribution of BOT to real expenditure-side GDP (change)	contGDPexp	
delB	0.0000	(Nominal balance of trade)/{nominal GDP} (change)	Consumption	0.0000
delV0tar_c	0.0221	Aggregate tariff revenue (change)	Investment	0.0000
delV0tax_csi	-12.2616	Aggregate revenue from all indirect taxes (change)	Government	0.0000
delV1tax_csi	7.4837	Aggregate revenue from indirect taxes on intermediate (change)	Stocks	0.0000
delV2tax_csi	-1.7909	Aggregate revenue from indirect taxes on investment (change)	Exports	0.0049
delV3tax_cs	-18.4674	Aggregate revenue from indirect taxes on households (change)	Imports	-0.0001
delV4tax_c	0.0049	Aggregate revenue from indirect taxes on export (change)		
delV5tax_cs	-0.0423	Aggregate revenue from indirect taxes on government (change)		
employ_i	0.0060	Aggregate employment: wage bill weights	contGDPinc	
f1lab_io	0.0000	Overall wage shifter	Land	0.0020
f2tot	0.0000	Ratio, investment/consumption	Labour	0.0025
f3tot	-0.0044	Ratio, consumption/ GDP	Capital	0.0000
f5tot	0.0000	Overall shift term for government demands	IndTax	0.0004
f5tot2	0.0000	Ratio between f5tot and x3tot	TechChange	0.0000
invslack	0.0417	Investment slack variable for exogenizing aggregate inve		
p0cif_c	0.0000	Imports price index, C.I.F., local currency		
p0gdpexp	-0.0070	GDP price index, expenditure side		
p0gne	-0.0060	GNE price index		
p0imp_c	0.0000	Duty-paid imports price index, local currency		
p0realdev	0.0070	Real devaluation		
p0toft	-0.0091	Terms of trade		
p1cap_i	0.0067	Average capital rental		
p1lab_io	-0.0065	Average nominal wage		
p1lnd_i	-0.3523	Average land rental		
p1prim_i	-0.0076	Index of factor cost		
p2tot_i	-0.0050	Aggregate investment price index		
p3tot	-0.0065	Consumer price index		
p4_ntrad	0.0000	Price, collective export aggregate		
p4tot	-0.0091	Exports price index, local currency		
p5tot	-0.0054	Government price index		
p6tot	-0.0083	Inventories price index		
phi	0.0000	Exchange rate, local currency/\$world		
q	0.0000	Number of households		
realwage	0.0000	Average real wage		
utility	0.0000	Utility per household		
w0cif_c	0.0006	C.I.F. local currency value of imports		
w0gdpexp	-0.0022	Nominal GDP from expenditure side		
w0gdpinc	-0.0022	Nominal GDP from income side		
w0gne	-0.0060	Nominal GNE		
w0imp_c	0.0005	Value of imports plus duty		
w0tax_csi	-0.0019	Aggregate revenue from all indirect taxes		
w1cap_i	0.0067	Aggregate payments to capital		
w1lab_io	-0.0006	Aggregate payments to labour		
w1lnd_i	-0.2409	Aggregate payments to land		
w1oct_i	0.0000	Aggregate "other cost" ticket payments		
w1prim_i	-0.0022	Aggregate primary factor payments		
w2tot_i	-0.0050	Aggregate nominal investment		
w3lux	-0.0062	Total nominal supernumerary household expenditure		
w3tot	-0.0065	Nominal total household consumption		
w4tot	0.0363	Local currency border value of exports		
w5tot	-0.0054	Aggregate nominal value of government demands		
w6tot	-0.0083	Aggregate nominal value of inventories		
x0cif_c	0.0006	Import volume index, C.I.F. weights		
x0gdpexp	0.0048	Real GDP from expenditure side		

x0gdpinc	0.0048	Decomposition of real GDP from income side
x0gne	0.0000	Real GNE
x0imp_c	0.0005	Import volume index, duty-paid weights
x1cap_i	0.0000	Aggregate capital stock, rental weights
x1lnd_i	0.1118	Aggregate land stock, rental weights
x1prim_i	0.0054	Aggregate effective primary factor use
x2tot_i	0.0000	Aggregate real investment expenditure
x3tot	0.0000	Real household consumption
x4_ntrad	0.0000	Quantity, collective export aggregate
x4tot	0.0453	Export volume index
x5tot	0.0000	Aggregate real government demands
x6tot	0.0000	Aggregate real inventories
x0gdpfac	0.0054	Real GDP at factor cost (inputs) = x1prim_i

## 9 IND variables

	employ	gret	p1cap	p1mat	p1prim	p1tot	p2tot	x1tot	x2tot
Agricultura	0.0353	0.1290	0.1241	-0.0021	-0.0588	-0.0359	-0.0050	0.0494	0.0714
Pecuaria	0.0291	0.1062	0.1013	-0.0162	-0.2352	-0.1336	-0.0050	0.0909	0.0563
PrFloPesSil	0.0002	-0.0007	-0.0057	-0.0033	-0.0058	-0.0051	-0.0050	0.0000	-0.0142
ExtMinNMet	0.0047	0.0059	0.0009	0.0001	-0.0023	-0.0010	-0.0050	0.0020	-0.0099
ExtPetrGas	0.0068	0.0045	-0.0004	-0.0014	-0.0016	-0.0015	-0.0050	0.0013	-0.0108
ExtMinFerro	0.0052	0.0067	0.0017	-0.0014	0.0009	0.0001	-0.0050	0.0005	-0.0093
ExtMMetNF	0.0074	0.0102	0.0052	-0.0013	-0.0001	-0.0009	-0.0050	0.0034	-0.0070
AbateCarne	0.1163	0.1578	0.1529	-0.0751	0.0478	-0.0572	-0.0050	0.0767	0.0904
FabRefAcu	0.0795	0.1073	0.1023	-0.0213	0.0283	-0.0110	-0.0050	0.0540	0.0570
OutAliment	0.0238	0.0310	0.0261	-0.0135	0.0061	-0.0101	-0.0050	0.0146	0.0067
Bebidas	0.0008	-0.0005	-0.0054	-0.0038	-0.0058	-0.0044	-0.0050	0.0003	-0.0141
Fumo	0.0338	0.0447	0.0398	-0.0164	0.0247	-0.0056	-0.0050	0.0110	0.0158
TexVestCalc	0.0032	0.0056	0.0006	-0.0047	-0.0041	-0.0045	-0.0050	0.0021	-0.0101
MadPapel	0.0117	0.0079	0.0029	-0.0007	-0.0022	-0.0012	-0.0050	0.0064	-0.0086
ImpRGrava	0.0026	0.0009	-0.0040	-0.0012	-0.0054	-0.0031	-0.0050	0.0015	-0.0132
RefPetCoq	-0.0050	-0.0091	-0.0140	-0.0034	-0.0121	-0.0040	-0.0050	-0.0013	-0.0198
FabBiocom	0.0611	0.0954	0.0905	-0.0207	0.0417	-0.0073	-0.0050	0.0307	0.0492
Quimicos	0.0195	0.0293	0.0244	-0.0003	0.0101	0.0022	-0.0050	0.0090	0.0056
FabBorPlast	0.0085	0.0066	0.0016	0.0000	-0.0036	-0.0010	-0.0050	0.0054	-0.0094
FabMinNMet	0.0066	0.0089	0.0039	-0.0003	-0.0018	-0.0008	-0.0050	0.0036	-0.0079
Metalurgia	0.0049	0.0063	0.0013	-0.0004	-0.0032	-0.0009	-0.0050	0.0028	-0.0096
FabProdMet	0.0055	0.0071	0.0022	-0.0008	-0.0030	-0.0016	-0.0050	0.0032	-0.0090
FabMaqEq	0.0026	0.0003	-0.0047	-0.0010	-0.0059	-0.0023	-0.0050	0.0017	-0.0136
TransEq	0.0029	0.0033	-0.0017	-0.0009	-0.0042	-0.0018	-0.0050	0.0015	-0.0116
FabOutr	0.0045	0.0071	0.0022	-0.0010	-0.0015	-0.0013	-0.0050	0.0019	-0.0090
EnerEleGasN	0.0175	0.0271	0.0222	0.0045	0.0170	0.0101	-0.0050	0.0031	0.0000
AguaEsgResid	0.0023	0.0021	-0.0028	-0.0002	-0.0041	-0.0023	-0.0050	0.0008	0.0000
Construo	-0.0020	-0.0048	-0.0098	-0.0019	-0.0085	-0.0049	-0.0050	-0.0008	0.0000
Comerc	0.0083	0.0077	0.0027	-0.0018	-0.0016	-0.0016	-0.0050	0.0039	-0.0087
TranspCorr	0.0129	0.0068	0.0018	-0.0025	-0.0026	-0.0026	-0.0050	0.0069	-0.0093
AlojAlim	0.0052	0.0067	0.0017	-0.0117	-0.0019	-0.0069	-0.0050	0.0023	0.0000
Telecomun	0.0045	0.0034	-0.0016	-0.0018	-0.0029	-0.0023	-0.0050	0.0012	-0.0115
ServicProf	0.0063	0.0082	0.0033	-0.0015	-0.0014	-0.0014	-0.0050	0.0030	0.0000
AtivImobili	0.0011	0.0002	-0.0047	-0.0013	-0.0047	-0.0045	-0.0050	0.0000	0.0000
AdmPublica	0.0001	-0.0014	-0.0064	-0.0029	-0.0065	-0.0055	-0.0050	0.0001	0.0000
Educacao	0.0002	-0.0012	-0.0061	-0.0034	-0.0065	-0.0058	-0.0050	0.0002	0.0000
Saude	-0.0002	-0.0019	-0.0068	-0.0027	-0.0066	-0.0050	-0.0050	-0.0001	0.0000
OutServPess	0.0003	-0.0011	-0.0061	-0.0023	-0.0064	-0.0048	-0.0050	0.0002	-0.0145

## 9 COM variables

	p0dom	p3_s	p4	x0com	x0dom	x0imp	x0loc	x3_s	x4
Agricultura	-0.0331	-0.0240	-0.0321	0.0531	0.0240	-0.0398	0.0212	0.0066	0.1609
Pecuaria	-0.1496	-0.1258	-0.1496	0.0765	0.0614	-0.2314	0.0610	0.0444	0.7514
PrFloPesSil	-0.0028	-0.0025	-0.0028	0.0101	0.0100	0.0148	0.0104	-0.0014	0.0141
ExtMinNMet	-0.0008	0.0000	-0.0008	0.0048	0.0049	0.0037	0.0045	-0.0023	0.0039
ExtPetrGas	-0.0013	0.0000	-0.0013	0.0015	-0.0002	-0.0010	-0.0004	-0.0023	0.0063
ExtMinFerro	0.0001	0.0000	0.0000	0.0005	0.0027	0.0025	0.0027	-0.0023	0.0001
ExtMMetNF	-0.0009	0.0000	-0.0009	0.0033	0.0028	0.0024	0.0027	-0.0023	0.0043
AbateCarne	-0.0592	-0.0459	-0.0582	0.0711	0.0220	-0.0645	0.0199	0.0147	0.2914
FabRefAcu	-0.0140	-0.0099	-0.0137	0.0495	0.0155	0.0053	0.0155	0.0014	0.0685
OutAliment	-0.0099	-0.0074	-0.0097	0.0165	0.0121	-0.0009	0.0116	0.0004	0.0487
Bebidas	-0.0045	-0.0036	-0.0045	0.0018	0.0012	-0.0047	0.0007	-0.0010	0.0223
Fumo	-0.0056	-0.0043	-0.0056	0.0118	0.0028	-0.0081	-0.0004	-0.0007	0.0281
TexVestCalc	-0.0045	-0.0032	-0.0045	0.0026	0.0010	-0.0047	0.0004	-0.0011	0.0226
MadPapel	-0.0012	-0.0011	-0.0012	0.0064	0.0065	0.0033	0.0063	-0.0019	0.0058
ImpRGrava	-0.0031	-0.0024	-0.0031	0.0015	0.0013	-0.0028	0.0011	-0.0014	0.0156
RefPetCoq	0.0004	0.0001	0.0003	0.0009	0.0013	0.0075	0.0022	-0.0023	-0.0017
FabBiocom	-0.0060	-0.0045	-0.0059	0.0052	0.0047	0.0000	0.0043	-0.0006	0.0297
Quimicos	0.0026	0.0011	0.0026	0.0091	0.0116	0.0083	0.0107	-0.0027	-0.0129
BorrPlast	-0.0010	-0.0009	-0.0010	0.0054	0.0054	0.0023	0.0050	-0.0020	0.0049
FabMinNMet	-0.0008	-0.0007	-0.0008	0.0036	0.0036	0.0066	0.0038	-0.0020	0.0041
Metalurgia	-0.0009	-0.0010	-0.0009	0.0029	0.0024	0.0017	0.0023	-0.0019	0.0044
FabProdMet	-0.0017	-0.0015	-0.0017	0.0032	0.0029	0.0026	0.0029	-0.0017	0.0084
FabMaqEq	-0.0024	-0.0017	-0.0024	0.0018	0.0006	0.0002	0.0004	-0.0017	0.0118
AutoCamUti	-0.0028	-0.0019	-0.0028	0.0010	-0.0003	-0.0033	-0.0008	-0.0016	0.0139
CamOnibus	-0.0019	-0.0016	-0.0019	0.0015	0.0004	-0.0014	0.0003	-0.0017	0.0094
PecasAutom	-0.0004	0.0000	-0.0004	0.0023	0.0023	0.0022	0.0023	-0.0023	0.0020
AeroEmbOut	-0.0012	-0.0011	-0.0012	0.0018	0.0000	0.0006	0.0002	-0.0019	0.0061
FabOutr	-0.0012	-0.0011	-0.0012	0.0022	0.0020	0.0009	0.0019	-0.0019	0.0062
EnerEleGasN	0.0101	0.0101	0.0101	0.0035	0.0037	0.0150	0.0039	-0.0060	-0.0507
AguaEsgResid	-0.0023	-0.0023	0.0000	0.0008	0.0008	0.0000	0.0008	-0.0014	0.0000
Construo	-0.0049	0.0000	-0.0049	0.0002	0.0000	-0.0066	0.0000	-0.0023	0.0246
Comerc	-0.0010	-0.0010	-0.0010	0.0046	0.0046	0.0112	0.0046	-0.0038	0.0052
TranspCorr	-0.0026	-0.0025	-0.0026	0.0068	0.0064	-0.0061	0.0060	-0.0041	0.0131
AlojAlim	-0.0069	-0.0066	-0.0069	0.0023	0.0011	-0.0052	0.0005	0.0001	0.0347
Telecomun	-0.0023	-0.0023	-0.0023	0.0012	0.0012	-0.0015	0.0011	-0.0015	0.0114
ServicProf	-0.0014	-0.0014	-0.0014	0.0030	0.0029	0.0023	0.0028	-0.0018	0.0071
AtivImobili	-0.0025	-0.0025	-0.0025	0.0017	0.0014	0.0001	0.0014	-0.0014	0.0124
AlugImp	-0.0052	-0.0052	0.0000	-0.0004	-0.0004	0.0000	-0.0004	-0.0004	0.0000
AdmPublica	-0.0056	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0023	0.0000
Educacao	-0.0060	-0.0060	-0.0060	0.0001	0.0001	-0.0070	0.0001	-0.0001	0.0301
Saude	-0.0050	-0.0050	-0.0050	-0.0001	-0.0002	-0.0040	-0.0002	-0.0004	0.0252
OutServPess	-0.0048	-0.0047	-0.0048	0.0002	0.0001	-0.0064	0.0000	-0.0005	0.0241

fandecamp	LocalMarket	DomShare	Export	Total
Agricultura	0.0167	0.0022	0.0342	0.0531
Pecuaría	0.0597	0.0004	0.0165	0.0765
PrFloPesSil	0.0101	-0.0004	0.0004	0.0101
ExtMinNMet	0.0042	0.0004	0.0002	0.0048
ExtPetrGas	-0.0003	0.0001	0.0016	0.0015
ExtMinFerro	0.0005	0.0000	0.0001	0.0005
ExtMMetNF	0.0018	0.0001	0.0014	0.0033
AbateCarne	0.0163	0.0017	0.0531	0.0711
FabRefAcu	0.0056	0.0000	0.0440	0.0495
OutAliment	0.0102	0.0004	0.0058	0.0165
Bebidas	0.0007	0.0005	0.0007	0.0018
Fumo	-0.0002	0.0020	0.0100	0.0118
TexVestCalc	0.0004	0.0005	0.0017	0.0026
MadPapel	0.0050	0.0002	0.0012	0.0064
ImpRGrava	0.0011	0.0002	0.0002	0.0015
RefPetCoq	0.0019	-0.0008	-0.0002	0.0009
FabBiocom	0.0042	0.0004	0.0006	0.0052
Quimicos	0.0096	0.0008	-0.0013	0.0091
BorrPlast	0.0047	0.0003	0.0003	0.0054
FabMinNMet	0.0035	-0.0002	0.0002	0.0036
Metalurgia	0.0017	0.0001	0.0011	0.0029
FabProdMet	0.0028	0.0000	0.0004	0.0032
FabMaqEq	0.0004	0.0001	0.0013	0.0018
AutoCamUti	-0.0007	0.0005	0.0013	0.0010
CamOnibus	0.0002	0.0001	0.0011	0.0015
PecasAutom	0.0019	0.0000	0.0003	0.0023
AeroEmbOut	0.0001	-0.0001	0.0018	0.0018
FabOutr	0.0018	0.0001	0.0003	0.0022
EnerEleGasN	0.0039	-0.0002	-0.0002	0.0035
AguaEsgResid	0.0008	0.0000	0.0000	0.0008
Construo	0.0000	0.0000	0.0001	0.0002
Comerc	0.0046	0.0000	0.0000	0.0046
TranspCorr	0.0057	0.0004	0.0006	0.0068
AlojAlim	0.0005	0.0006	0.0012	0.0023
Telecomun	0.0011	0.0000	0.0001	0.0012
ServicProf	0.0028	0.0000	0.0002	0.0030
AtivImobili	0.0013	0.0000	0.0004	0.0017
AlugImp	-0.0004	0.0000	0.0000	-0.0004
AdmPublica	0.0000	0.0000	0.0000	0.0000
Educacao	0.0001	0.0000	0.0000	0.0001
Saude	-0.0002	0.0000	0.0000	-0.0001
OutServPess	0.0000	0.0001	0.0001	0.0002

SalesDecom	Interm	Invest	HouseH	Export	GovGE	Stocks	Margins
Agricultura	0.0168	0.0000	0.0022	0.0342	0.0000	0.0000	0.0000
Pecuaria	0.0541	0.0002	0.0058	0.0165	0.0000	0.0000	0.0000
PrFloPesSil	0.0101	0.0000	-0.0004	0.0004	0.0000	0.0000	0.0000
ExtMinNMet	0.0046	0.0000	0.0000	0.0002	0.0000	0.0000	0.0000
ExtPetrGas	-0.0002	0.0000	0.0000	0.0016	0.0000	0.0000	0.0000
ExtMinFerro	0.0005	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000
ExtMMetNF	0.0019	0.0000	0.0000	0.0014	0.0000	0.0000	0.0000
AbateCarne	0.0078	0.0000	0.0102	0.0531	0.0000	0.0000	0.0000
FabRefAcu	0.0054	0.0000	0.0002	0.0440	0.0000	0.0000	0.0000
OutAliment	0.0102	0.0000	0.0005	0.0058	0.0000	0.0000	0.0000
Bebidas	0.0015	0.0000	-0.0003	0.0007	0.0000	0.0000	0.0000
Fumo	0.0011	0.0000	0.0007	0.0100	0.0000	0.0000	0.0000
TexVestCalc	0.0013	0.0000	-0.0004	0.0017	0.0000	0.0000	0.0000
MadPapel	0.0054	0.0000	-0.0002	0.0012	0.0000	0.0000	0.0000
ImpRGrava	0.0016	0.0000	-0.0004	0.0002	0.0000	0.0000	0.0000
RefPetCoq	0.0024	0.0000	-0.0013	-0.0002	0.0000	0.0000	0.0000
FabBiocom	0.0046	0.0000	-0.0001	0.0006	0.0000	0.0000	0.0000
Quimicos	0.0111	0.0000	-0.0006	-0.0013	0.0000	0.0000	0.0000
BorrPlast	0.0052	0.0000	-0.0001	0.0003	0.0000	0.0000	0.0000
FabMinNMet	0.0034	0.0000	0.0000	0.0002	0.0000	0.0000	0.0000
Metalurgia	0.0018	0.0000	0.0000	0.0011	0.0000	0.0000	0.0000
FabProdMet	0.0029	0.0000	-0.0002	0.0004	0.0000	0.0000	0.0000
FabMaqEq	0.0006	0.0001	-0.0003	0.0013	0.0000	0.0000	0.0000
AutoCamUti	0.0000	0.0002	-0.0005	0.0013	0.0000	0.0000	0.0000
CamOnibus	0.0003	0.0001	0.0000	0.0011	0.0000	0.0000	0.0000
PecasAutom	0.0019	0.0000	0.0000	0.0003	0.0000	0.0000	0.0000
AeroEmbOut	0.0004	0.0000	-0.0005	0.0018	0.0000	0.0000	0.0000
FabOutr	0.0024	0.0000	-0.0005	0.0003	0.0000	0.0000	0.0000
EnerEleGasN	0.0055	0.0000	-0.0018	-0.0002	0.0000	0.0000	0.0000
AguaEsgResid	0.0014	0.0000	-0.0006	0.0000	0.0000	0.0000	0.0000
Construo	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000
Comerc	0.0007	0.0000	-0.0002	0.0000	0.0000	0.0000	0.0041
TranspCorr	0.0051	0.0000	-0.0009	0.0006	0.0000	0.0000	0.0019
AlojAlim	0.0007	0.0000	0.0004	0.0012	0.0000	0.0000	0.0000
Telecomun	0.0017	0.0000	-0.0006	0.0001	0.0000	0.0000	0.0000
ServicProf	0.0031	0.0000	-0.0004	0.0002	0.0000	0.0000	0.0000
AtivImobili	0.0019	0.0000	-0.0006	0.0004	0.0000	0.0000	0.0000
AlugImp	0.0000	0.0000	-0.0004	0.0000	0.0000	0.0000	0.0000
AdmPublica	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Educacao	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Saude	0.0000	0.0000	-0.0001	0.0000	0.0000	0.0000	0.0000
OutServPess	0.0003	0.0000	-0.0003	0.0001	0.0000	0.0000	0.0000

! Command file for ORANIG model, short-run closure

check-on-read elements = warn; ! very often needed  
 cpu=yes; ! (Optional) Reports CPU times for various stages  
 log file = yes; ! Optional  
 auxiliary files = oranig; ! needed by GEMSIM

! Solution method

method = GRAGG ;  
 steps = 2 4 6 ;  
 !method = johansen; ! alternative to above

! Data and summary file

!file basedata = basedata.har ;  
 file basedata = aggnat.har ;  
 updated file basedata =<cmf>.upd;  
 file summary = summary.har;

! Automatic closure generated by TABmate Tools...Closure command

! Please do not edit -- instead, add swap statements underneath.

!	Variable	Size	
Exogenous	a0com ; !	COM	Commodity CET technology shifter (negative=good)
Exogenous	a1cap ; !	IND	Capital-augmenting technical change
Exogenous	a1lab_o ; !	IND	Labor-augmenting technical change
Exogenous	a1ld ; !	IND	Land-augmenting technical change
Exogenous	a1prim ; !	IND	All factor augmenting technical change
Exogenous	a1tot ; !	IND	All input augmenting technical change
Exogenous	a2tot ; !	IND	Neutral technical change - investment
Exogenous	a3_s ; !	COM	Taste change, household imp/dom composite
Exogenous	capslack ; !	1	Slack variable to allow fixing aggregate capital
Exogenous	delPTXRATE ; !	IND*DTAX	Change in rate of production tax
Exogenous	f0tax_s ; !	COM*TAXS	General sales tax shifter
Exogenous	f1lab_io ; !	1	Overall wage shifter
Exogenous	f1oct ; !	IND	Shift in price of "other cost" tickets
Exogenous	f1tax_csi ; !	1	Uniform % change in powers of taxes on intermediate usage
Exogenous	f2tax_csi ; !	1	Uniform % change in powers of taxes on investment
Exogenous	f3tax_cs ; !	1	Uniform % change in powers of taxes on household usage
Exogenous	f3tax_s ; !	COM*TAXS	household sales tax shifter
Exogenous	f4p ; !	COM	Price (upward) shift in export demand schedule
Exogenous	f4p_ntrad ; !	1	Uniform upward (price) demand shift for collective exports
Exogenous	f4q ; !	COM	Quantity (right) shift in export demands
Exogenous	f4q_ntrad ; !	1	Uniform right (quantity) demand shift for collective exports
Exogenous	f4tax_ntrad ; !	1	Uniform % change in powers of taxes on nontradtnl exports
Exogenous	f4tax_trad ; !	TRADEXP*TAXS	% change in powers of taxes on tradtnl exports
Exogenous	f5 ; !	COM*SRC	Government demand shift
Exogenous	f5tax_cs ; !	1	Uniform % change in powers of taxes on government usage
Exogenous	f5tot2 ; !	1	Ratio between f5tot and x3tot
Exogenous	fx6 ; !	COM*SRC	Shifter on rule for stocks
Exogenous	invslack ; !	1	Investment slack variable for exogenizing aggregate investment
Exogenous	pf0cif ; !	COM	C.I.F. foreign currency import prices
Exogenous	phi ; !	1	Exchange rate, local currency/\$world
Exogenous	q ; !	1	Number of households
Exogenous	t0imp ; !	COM	Power of tariff
Exogenous	w3lux ; !	1	Total nominal supernumerary household expenditure
Exogenous	x1cap ; !	IND	Current capital stock

Exogenous x1Ind ; ! IND Use of land  
Exogenous x2tot ; ! IND Investment by using industry  
Rest endogenous; ! end of TABmate automatic closure

```
swap f1lab_io = realwage;  
! swaps for exogenous settings of real GDP from the expenditure side  
swap invslack = x2tot_i;  
swap w3lux = x3tot;  
swap f5tot2 = x5tot;  
swap fx6 = delx6;
```

```
! Distribution of investment between industries  
xSet EXOGINV # 'exogenous' investment industries #  
(EnerEleGasN, AguaEsgResid, Construo, ServicProf, AlojAlim,  
AtivImobili, AdmPublica, Educacao, Saude);  
xSubset EXOGINV is subset of IND;  
xSet ENDOGINV # 'endogenous' investment industries # = IND - EXOGINV;  
swap x2tot(ENDOGINV) = finv1(ENDOGINV);  
swap x2tot(EXOGINV) = finv2(EXOGINV);
```

```
verbal description =  
Group 1: deforestation increases agricultural land: DPSV shortrun closure;
```

```
shock x1Ind("Agricultura") = 0.16;  
shock x1Ind("Pecuararia") = 0.36;
```



contBOT	0.0007	Contribution of BOT to real expenditure-side GDP (change)	contGDPexp	
delB	0.0000	(Nominal balance of trade)/{nominal GDP} (change)	Consumption	0.0196
delV0tar_c	10.6036	Aggregate tariff revenue (change)	Investment	0.0131
delV0tax_csi	377.3688	Aggregate revenue from all indirect taxes (change)	Government	0.0000
delV1tax_csi	124.7072	Aggregate revenue from indirect taxes on intermediate (change)	Stocks	0.0000
delV2tax_csi	46.6847	Aggregate revenue from indirect taxes on investment (change)	Exports	0.0054
delV3tax_cs	161.5936	Aggregate revenue from indirect taxes on households (change)	Imports	-0.0047
delV4tax_c	-0.0959	Aggregate revenue from indirect taxes on export (change)		
delV5tax_cs	0.9624	Aggregate revenue from indirect taxes on government (change)		
employ_i	0.0000	Aggregate employment: wage bill weights	contGDPinc	
f1lab_io	0.0906	Overall wage shifter	Land	0.0099
f2tot	0.0306	Ratio, investment/consumption	Labour	0.0000
f3tot	-0.0162	Ratio, consumption/ GDP	Capital	0.0183
f5tot	0.0000	Overall shift term for government demands	IndTax	0.0051
f5tot2	-0.0335	Ratio between f5tot and x3tot	TechChange	0.0000
invslack	0.0000	Investment slack variable for exogenizing aggregate inve		
p0cif_c	0.0000	Imports price index, C.I.F., local currency		
p0gdpexp	0.0491	GDP price index, expenditure side		
p0gne	0.0499	GNE price index		
p0imp_c	0.0000	Duty-paid imports price index, local currency		
p0realdev	-0.0491	Real devaluation		
p0toft	-0.0100	Terms of trade		
p1cap_i	0.0549	Average capital rental		
p1lab_io	0.1232	Average nominal wage		
p1lnd_i	-1.5803	Average land rental		
p1prim_i	0.0534	Index of factor cost		
p2tot_i	0.0549	Aggregate investment price index		
p3tot	0.0326	Consumer price index		
p4_ntrad	0.0000	Price, collective export aggregate		
p4tot	-0.0100	Exports price index, local currency		
p5tot	0.0974	Government price index		
p6tot	-0.0028	Inventories price index		
phi	0.0000	Exchange rate, local currency/\$world		
q	0.0000	Number of households		
realwage	0.0906	Average real wage		
utility	0.0831	Utility per household		
w0cif_c	0.0419	C.I.F. local currency value of imports		
w0gdpexp	0.0824	Nominal GDP from expenditure side		
w0gdpinc	0.0824	Nominal GDP from income side		
w0gne	0.0824	Nominal GNE		
w0imp_c	0.0423	Value of imports plus duty		
w0tax_csi	0.0583	Aggregate revenue from all indirect taxes		
w1cap_i	0.1004	Aggregate payments to capital		
w1lab_io	0.1232	Aggregate payments to labour		
w1lnd_i	-1.0346	Aggregate payments to land		
w1oct_i	0.0000	Aggregate "other cost" ticket payments		
w1prim_i	0.0872	Aggregate primary factor payments		
w2tot_i	0.1190	Aggregate nominal investment		
w3lux	0.1176	Total nominal supernumerary household expenditure		
w3tot	0.0662	Nominal total household consumption		
w4tot	0.0400	Local currency border value of exports		
w5tot	0.0974	Aggregate nominal value of government demands		
w6tot	-0.0028	Aggregate nominal value of inventories		
x0cif_c	0.0419	Import volume index, C.I.F. weights		
x0gdpexp	0.0333	Real GDP from expenditure side		

x0gdpinc	0.0333	Decomposition of real GDP from income side
x0gne	0.0325	Real GNE
x0imp_c	0.0423	Import volume index, duty-paid weights
x1cap_i	0.0454	Aggregate capital stock, rental weights
x1lnd_i	0.5545	Aggregate land stock, rental weights
x1prim_i	0.0338	Aggregate effective primary factor use
x2tot_i	0.0641	Aggregate real investment expenditure
x3tot	0.0335	Real household consumption
x4_ntrad	0.0000	Quantity, collective export aggregate
x4tot	0.0500	Export volume index
x5tot	0.0000	Aggregate real government demands
x6tot	0.0000	Aggregate real inventories
x0gdppfac	0.0338	Real GDP at factor cost (inputs) = x1prim_i

## 9 IND variables

	employ	gret	p1cap	p1mat	p1prim	p1tot	p2tot	x1tot	x2tot
Agricultura	0.2648	0.0000	0.0549	0.0201	-0.4259	-0.2454	0.0549	0.4138	0.2833
Pecuaria	0.1390	0.0000	0.0549	-0.0566	-1.2670	-0.7055	0.0549	0.5178	0.1575
PrFloPesSil	-0.0556	0.0000	0.0549	0.0229	0.0242	0.0239	0.0549	-0.0289	-0.0372
ExtMinNMet	-0.0152	0.0000	0.0549	0.0533	0.0926	0.0706	0.0549	0.0041	0.0278
ExtPetrGas	-0.2394	0.0000	0.0549	0.0484	0.0290	0.0380	0.0549	-0.1341	-0.1630
ExtMinFerro	-0.1738	0.0000	0.0549	0.0421	-0.0003	0.0148	0.0549	-0.0961	-0.1308
ExtMMetNF	-0.1771	0.0000	0.0549	0.0415	0.0469	0.0433	0.0549	-0.1291	-0.1342
AbateCarne	0.4299	0.0000	0.0549	-0.3711	0.1000	-0.3025	0.0549	0.4470	0.4800
FabRefAcu	0.1849	0.0000	0.0549	-0.1291	0.1014	-0.0814	0.0549	0.2009	0.2349
OutAliment	0.0808	0.0000	0.0549	-0.0534	0.0967	-0.0275	0.0549	0.1002	0.1307
Bebidas	-0.0426	0.0000	0.0549	0.0427	0.0764	0.0534	0.0549	-0.0085	0.0072
Fumo	0.0949	0.0000	0.0549	-0.0872	0.0772	-0.0438	0.0549	0.1285	0.1448
TexVestCalc	-0.0355	0.0000	0.0549	0.0309	0.1000	0.0560	0.0549	-0.0251	-0.0048
MadPapel	-0.0947	0.0000	0.0549	0.0561	0.0920	0.0670	0.0549	-0.0561	-0.0101
ImpRGrava	-0.0283	0.0000	0.0549	0.0627	0.0933	0.0763	0.0549	0.0031	0.0432
RefPetCoq	-0.1708	0.0000	0.0549	-0.0223	0.0726	-0.0157	0.0549	-0.1374	-0.1258
FabBiocom	1.1911	0.0000	0.0549	-0.1219	0.0893	-0.0765	0.0549	1.2127	1.2346
Quimicos	0.0311	0.0000	0.0549	0.0437	0.0864	0.0540	0.0549	0.0544	0.0742
FabBorPlast	-0.0351	0.0000	0.0549	0.0480	0.0988	0.0626	0.0549	-0.0098	0.0359
FabMinNMet	0.0129	0.0000	0.0549	0.0562	0.0923	0.0686	0.0549	0.0324	0.0560
Metalurgia	-0.0975	0.0000	0.0549	0.0472	0.0941	0.0557	0.0549	-0.0792	-0.0545
FabProdMet	-0.0079	0.0000	0.0549	0.0543	0.0952	0.0699	0.0549	0.0098	0.0351
FabMaqEq	-0.0457	0.0000	0.0549	0.0465	0.0995	0.0604	0.0549	-0.0134	0.0472
TransEq	-0.0398	0.0000	0.0549	0.0479	0.0907	0.0590	0.0549	-0.0204	0.0010
FabOutr	-0.0316	0.0000	0.0549	0.0525	0.0842	0.0663	0.0549	-0.0114	0.0037
EnerEleGasN	0.0035	0.0000	0.0549	0.0528	0.0671	0.0592	0.0549	0.0377	0.0641
AguaEsgResid	-0.0206	0.0000	0.0549	0.0595	0.0783	0.0699	0.0549	0.0068	0.0641
Construo	0.0266	0.0000	0.0549	0.0599	0.0822	0.0702	0.0549	0.0524	0.0641
Comerc	0.0068	0.0000	0.0549	0.0526	0.0866	0.0743	0.0549	0.0398	0.0683
TranspCorr	-0.0134	0.0000	0.0549	0.0234	0.0914	0.0536	0.0549	0.0358	0.0922
AlojAlim	-0.0085	0.0000	0.0549	-0.0130	0.0850	0.0356	0.0549	0.0156	0.0641
Telecomun	-0.0347	0.0000	0.0549	0.0684	0.0733	0.0705	0.0549	0.0107	0.0274
ServicProf	-0.0214	0.0000	0.0549	0.0694	0.0874	0.0807	0.0549	0.0014	0.0641
AtivImobili	-0.0209	0.0000	0.0549	0.0721	0.0559	0.0571	0.0549	0.0215	0.0641
AdmPublica	-0.0057	0.0000	0.0549	0.0593	0.1151	0.0988	0.0549	-0.0010	0.0641
Educacao	-0.0019	0.0000	0.0549	0.0510	0.1192	0.1027	0.0549	0.0005	0.0641
Saude	-0.0051	0.0000	0.0549	0.0566	0.1084	0.0873	0.0549	0.0039	0.0641
OutServPess	-0.0064	0.0000	0.0549	0.0500	0.1056	0.0839	0.0549	0.0047	0.0366

## 9 COM variables

	p0dom	p3_s	p4	x0com	x0dom	x0imp	x0loc	x3_s	x4
Agricultura	-0.2358	-0.1498	-0.2262	0.4254	0.2328	-0.2705	0.2106	0.0993	1.1385
Pecuaria	-0.7907	-0.6512	-0.7907	0.4499	0.3693	-1.1668	0.3671	0.2869	4.0492
PrFloPesSil	0.0381	0.0440	0.0381	0.0361	0.0428	0.1623	0.0527	0.0273	-0.1903
ExtMinNMet	0.0757	0.0000	0.0758	0.0230	0.0495	-0.0447	0.0171	0.0436	-0.3779
ExtPetrGas	0.0375	0.0000	0.0375	-0.1340	-0.1152	-0.0694	-0.1049	0.0436	-0.1871
ExtMinFerro	0.0145	0.0000	0.0199	-0.0962	-0.0815	-0.0615	-0.0814	0.0436	-0.0994
ExtMMetNF	0.0430	0.0000	0.0430	-0.1269	-0.0829	-0.0623	-0.0778	0.0436	-0.2145
AbateCarne	-0.3143	-0.2258	-0.3072	0.4136	0.1606	-0.2877	0.1498	0.1276	1.5502
FabRefAcu	-0.0897	-0.0348	-0.0853	0.3237	0.1382	0.1770	0.1383	0.0565	0.4274
OutAliment	-0.0283	0.0007	-0.0263	0.1100	0.1071	0.0563	0.1052	0.0433	0.1318
Bebidas	0.0538	0.0565	0.0538	0.0036	0.0118	0.0793	0.0172	0.0227	-0.2684
Fumo	-0.0451	-0.0281	-0.0451	0.1323	0.0808	-0.0103	0.0545	0.0540	0.2259
TexVestCalc	0.0561	0.0596	0.0563	-0.0204	0.0011	0.0696	0.0081	0.0215	-0.2809
MadPapel	0.0673	0.0688	0.0673	-0.0544	0.0187	0.0591	0.0212	0.0181	-0.3360
ImpRGrava	0.0769	0.0730	0.0769	0.0027	0.0089	0.0790	0.0118	0.0165	-0.3835
RefPetCoq	0.1208	0.1133	0.1191	-0.0693	0.0100	0.0528	0.0162	0.0016	-0.5932
FabBiocom	-0.0781	-0.0355	-0.0768	-0.0057	-0.0137	-0.0849	-0.0196	0.0568	0.3846
Quimicos	0.0545	0.0528	0.0546	0.0523	0.0884	0.0571	0.0799	0.0240	-0.2726
BorrPlast	0.0629	0.0600	0.0629	-0.0094	0.0136	0.0907	0.0228	0.0213	-0.3139
FabMinNMet	0.0692	0.0581	0.0692	0.0322	0.0554	0.1344	0.0599	0.0221	-0.3455
Metalurgia	0.0547	0.0640	0.0547	-0.0779	-0.0159	0.0114	-0.0111	0.0199	-0.2732
FabProdMet	0.0712	0.0699	0.0712	0.0027	0.0197	0.0543	0.0226	0.0177	-0.3551
FabMaqEq	0.0600	0.0571	0.0600	-0.0125	0.0235	0.0376	0.0282	0.0224	-0.2995
AutoCamUti	0.0718	0.0614	0.0718	-0.0141	0.0209	0.0857	0.0316	0.0208	-0.3581
CamOnibus	0.0823	0.0784	0.0823	-0.0086	0.0474	0.1316	0.0516	0.0145	-0.4104
PecasAutom	0.0340	0.0000	0.0341	-0.0324	-0.0067	0.0045	-0.0046	0.0436	-0.1701
AeroEmbOut	0.0325	0.0405	0.0325	-0.0334	0.0220	0.0265	0.0234	0.0286	-0.1621
FabOutr	0.0665	0.0668	0.0666	-0.0089	0.0059	0.0900	0.0156	0.0188	-0.3326
EnerEleGasN	0.0592	0.0593	0.0592	0.0404	0.0417	0.1069	0.0428	0.0216	-0.2953
AguaEsgResid	0.0701	0.0701	0.0000	0.0062	0.0062	0.0000	0.0062	0.0176	0.0000
Construo	0.0702	0.0000	0.0702	0.0560	0.0579	0.1243	0.0580	0.0436	-0.3504
Comerc	0.0808	0.0808	0.0808	0.0468	0.0483	0.2629	0.0488	0.0273	-0.4029
TranspCorr	0.0528	0.0513	0.0528	0.0340	0.0494	0.2129	0.0549	0.0749	-0.2638
AlojAlim	0.0350	0.0333	0.0350	0.0154	0.0220	0.0543	0.0252	0.0313	-0.1750
Telecomun	0.0704	0.0702	0.0704	0.0107	0.0126	0.0942	0.0137	0.0176	-0.3514
ServicProf	0.0810	0.0808	0.0810	0.0023	0.0165	0.0967	0.0217	0.0136	-0.4042
AtivImobili	0.0542	0.0542	0.0542	0.0138	0.0222	0.0846	0.0239	0.0235	-0.2704
AlugImp	0.0581	0.0581	0.0000	0.0220	0.0220	0.0000	0.0220	0.0220	0.0000
AdmPublica	0.1008	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0436	0.0000
Educacao	0.1041	0.1036	0.1041	0.0011	0.0013	0.1332	0.0014	0.0052	-0.5186
Saude	0.0874	0.0874	0.0874	0.0040	0.0040	0.0718	0.0040	0.0112	-0.4361
OutServPess	0.0839	0.0824	0.0839	0.0059	0.0086	0.1153	0.0097	0.0130	-0.4185

fandecomp	LocalMarket	DomShare	Export	Total
Agricultura	0.1658	0.0175	0.2420	0.4254
Pecuaria	0.3590	0.0021	0.0887	0.4499
PrFloPesSil	0.0512	-0.0096	-0.0054	0.0361
ExtMinNMet	0.0160	0.0305	-0.0235	0.0230
ExtPetrGas	-0.0775	-0.0077	-0.0488	-0.1340
ExtMinFerro	-0.0142	0.0000	-0.0820	-0.0962
ExtMMetNF	-0.0518	-0.0034	-0.0717	-0.1269
AbateCarne	0.1225	0.0089	0.2822	0.4136
FabRefAcu	0.0496	0.0000	0.2741	0.3237
OutAliment	0.0927	0.0016	0.0157	0.1100
Bebidas	0.0167	-0.0052	-0.0079	0.0036
Fumo	0.0351	0.0170	0.0801	0.1323
TexVestCalc	0.0075	-0.0065	-0.0214	-0.0204
MadPapel	0.0169	-0.0020	-0.0692	-0.0544
ImpRGrava	0.0116	-0.0029	-0.0061	0.0027
RefPetCoq	0.0141	-0.0054	-0.0780	-0.0693
FabBiocom	-0.0192	0.0058	0.0078	-0.0057
Quimicos	0.0719	0.0077	-0.0273	0.0523
BorrPlast	0.0212	-0.0085	-0.0221	-0.0094
FabMinNMet	0.0564	-0.0042	-0.0200	0.0322
Metalurgia	-0.0084	-0.0036	-0.0658	-0.0779
FabProdMet	0.0216	-0.0028	-0.0161	0.0027
FabMaqEq	0.0251	-0.0042	-0.0334	-0.0125
AutoCamUti	0.0287	-0.0097	-0.0330	-0.0141
CamOnibus	0.0453	-0.0037	-0.0502	-0.0086
PecasAutom	-0.0039	-0.0018	-0.0267	-0.0324
AeroEmbOut	0.0164	-0.0010	-0.0488	-0.0334
FabOutr	0.0149	-0.0093	-0.0145	-0.0089
EnerEleGasN	0.0426	-0.0011	-0.0011	0.0404
AguaEsgResid	0.0062	0.0000	0.0000	0.0062
Construo	0.0577	-0.0001	-0.0016	0.0560
Comerc	0.0487	-0.0005	-0.0013	0.0468
TranspCorr	0.0522	-0.0052	-0.0130	0.0340
AlojAlim	0.0243	-0.0030	-0.0059	0.0154
Telecomun	0.0137	-0.0011	-0.0018	0.0107
ServicProf	0.0209	-0.0050	-0.0137	0.0023
AtivImobili	0.0232	-0.0016	-0.0078	0.0138
AlugImp	0.0220	0.0000	0.0000	0.0220
AdmPublica	0.0000	0.0000	0.0000	0.0000
Educacao	0.0014	-0.0002	-0.0001	0.0011
Saude	0.0040	0.0000	-0.0001	0.0040
OutServPess	0.0097	-0.0012	-0.0026	0.0059

SalesDecom	Interm	Invest	HouseH	Export	GovGE	Stocks	Margins
Agricultura	0.1561	0.0002	0.0270	0.2420	0.0000	0.0000	0.0000
Pecuaría	0.3158	0.0081	0.0372	0.0887	0.0000	0.0000	0.0000
PrFloPesSil	0.0280	0.0047	0.0089	-0.0054	0.0000	0.0000	0.0000
ExtMinNMet	0.0465	0.0000	0.0000	-0.0235	0.0000	0.0000	0.0000
ExtPetrGas	-0.0902	0.0050	0.0000	-0.0488	0.0000	0.0000	0.0000
ExtMinFerro	-0.0142	0.0000	0.0000	-0.0820	0.0000	0.0000	0.0000
ExtMMetNF	-0.0552	0.0000	0.0000	-0.0717	0.0000	0.0000	0.0000
AbateCarne	0.0474	0.0000	0.0840	0.2822	0.0000	0.0000	0.0000
FabRefAcu	0.0430	0.0000	0.0066	0.2741	0.0000	0.0000	0.0000
OutAliment	0.0696	0.0000	0.0247	0.0157	0.0000	0.0000	0.0000
Bebidas	0.0017	0.0000	0.0098	-0.0079	0.0000	0.0000	0.0000
Fumo	0.0128	0.0000	0.0394	0.0801	0.0000	0.0000	0.0000
TexVestCalc	-0.0082	0.0000	0.0091	-0.0214	0.0000	0.0000	0.0000
MadPapel	0.0131	0.0001	0.0016	-0.0692	0.0000	0.0000	0.0000
ImpRGrava	0.0053	0.0000	0.0034	-0.0061	0.0000	0.0000	0.0000
RefPetCoq	0.0078	0.0000	0.0009	-0.0780	0.0000	0.0000	0.0000
FabBiocom	-0.0210	0.0000	0.0075	0.0078	0.0000	0.0000	0.0000
Quimicos	0.0746	0.0000	0.0050	-0.0273	0.0000	0.0000	0.0000
BorrPlast	0.0119	0.0000	0.0008	-0.0221	0.0000	0.0000	0.0000
FabMinNMet	0.0522	0.0000	0.0001	-0.0200	0.0000	0.0000	0.0000
Metalurgia	-0.0121	0.0000	0.0001	-0.0658	0.0000	0.0000	0.0000
FabProdMet	0.0125	0.0049	0.0015	-0.0161	0.0000	0.0000	0.0000
FabMaqEq	-0.0049	0.0222	0.0035	-0.0334	0.0000	0.0000	0.0000
AutoCamUti	-0.0006	0.0176	0.0019	-0.0330	0.0000	0.0000	0.0000
CamOnibus	-0.0027	0.0442	0.0001	-0.0502	0.0000	0.0000	0.0000
PecasAutom	-0.0057	0.0000	0.0000	-0.0267	0.0000	0.0000	0.0000
AeroEmbOut	-0.0033	0.0116	0.0071	-0.0488	0.0000	0.0000	0.0000
FabOutr	-0.0043	0.0072	0.0027	-0.0145	0.0000	0.0000	0.0000
EnerEleGasN	0.0352	0.0000	0.0063	-0.0011	0.0000	0.0000	0.0000
AguaEsgResid	-0.0010	0.0000	0.0072	0.0000	0.0000	0.0000	0.0000
Construo	0.0045	0.0531	0.0000	-0.0016	0.0000	0.0000	0.0000
Comerc	0.0029	0.0000	0.0013	-0.0013	0.0000	0.0000	0.0439
TranspCorr	0.0184	0.0000	0.0160	-0.0130	0.0000	0.0000	0.0126
AlojAlim	-0.0004	0.0000	0.0217	-0.0059	0.0000	0.0000	0.0000
Telecomun	0.0055	0.0000	0.0070	-0.0018	0.0000	0.0000	0.0000
ServicProf	0.0085	0.0047	0.0027	-0.0137	0.0000	0.0000	0.0000
AtivImobili	0.0116	0.0000	0.0100	-0.0078	0.0000	0.0000	0.0000
AlugImp	0.0000	0.0000	0.0220	0.0000	0.0000	0.0000	0.0000
AdmPublica	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Educacao	0.0001	0.0000	0.0011	-0.0001	0.0000	0.0000	0.0000
Saude	0.0002	0.0000	0.0038	-0.0001	0.0000	0.0000	0.0000
OutServPess	0.0015	0.0000	0.0070	-0.0026	0.0000	0.0000	0.0000

! Command file for ORANIG model, long-run closure

check-on-read elements = warn; ! very often needed  
 cpu=yes; ! (Optional) Reports CPU times for various stages  
 log file = yes; ! Optional  
 auxiliary files = oranig; ! needed by GEMSIM

! Solution method

method = GRAGG ;  
 steps = 2 4 6 ;  
 !method = johansen; ! alternative to above

! Data and summary file

!file basedata = basedata.har ;  
 file basedata = aggnat.har ;  
 updated file basedata =<cmf>.upd;  
 file summary = summary.har;

! Automatic closure generated by TABmate Tools...Closure command

! Please do not edit -- instead, add swap statements underneath.

!	Variable	Size	
Exogenous	a0com ; !	COM	Commodity CET technology shifter (negative=good)
Exogenous	a1cap ; !	IND	Capital-augmenting technical change
Exogenous	a1lab_o ; !	IND	Labor-augmenting technical change
Exogenous	a1ld ; !	IND	Land-augmenting technical change
Exogenous	a1prim ; !	IND	All factor augmenting technical change
Exogenous	a1tot ; !	IND	All input augmenting technical change
Exogenous	a2tot ; !	IND	Neutral technical change - investment
Exogenous	a3_s ; !	COM	Taste change, household imp/dom composite
Exogenous	capslack ; !	1	Slack variable to allow fixing aggregate capital
Exogenous	delPTXRATE ; !	IND*DTAX	Change in rate of production tax
Exogenous	f0tax_s ; !	COM*TAXS	General sales tax shifter
Exogenous	f1lab_io ; !	1	Overall wage shifter
Exogenous	f1oct ; !	IND	Shift in price of "other cost" tickets
Exogenous	f1tax_csi ; !	1	Uniform % change in powers of taxes on intermediate usage
Exogenous	f2tax_csi ; !	1	Uniform % change in powers of taxes on investment
Exogenous	f3tax_cs ; !	1	Uniform % change in powers of taxes on household usage
Exogenous	f3tax_s ; !	COM*TAXS	household sales tax shifter
Exogenous	f4p ; !	COM	Price (upward) shift in export demand schedule
Exogenous	f4p_ntrad ; !	1	Uniform upward (price) demand shift for collective exports
Exogenous	f4q ; !	COM	Quantity (right) shift in export demands
Exogenous	f4q_ntrad ; !	1	Uniform right (quantity) demand shift for collective exports
Exogenous	f4tax_ntrad ; !	1	Uniform % change in powers of taxes on nontradtnl exports
Exogenous	f4tax_trad ; !	TRADEXP*TAXS	% change in powers of taxes on tradtnl exports
Exogenous	f5 ; !	COM*SRC	Government demand shift
Exogenous	f5tax_cs ; !	1	Uniform % change in powers of taxes on government usage
Exogenous	f5tot2 ; !	1	Ratio between f5tot and x3tot
Exogenous	fx6 ; !	COM*SRC	Shifter on rule for stocks
Exogenous	invslack ; !	1	Investment slack variable for exogenizing aggregate investment
Exogenous	pf0cif ; !	COM	C.I.F. foreign currency import prices
Exogenous	phi ; !	1	Exchange rate, local currency/\$world
Exogenous	q ; !	1	Number of households
Exogenous	t0imp ; !	COM	Power of tariff
Exogenous	w3lux ; !	1	Total nominal supernumerary household expenditure
Exogenous	x1cap ; !	IND	Current capital stock

Exogenous x1Ind ; ! IND Use of land  
Exogenous x2tot ; ! IND Investment by using industry  
Rest endogenous; ! end of TABmate automatic closure

swap f1lab\_io = realwage;  
! swaps for exogenous settings of real GDP from the expenditure side  
swap invslack = x2tot\_i;  
swap w3lux = x3tot;  
swap f5tot2 = x5tot;  
swap fx6 = delx6;

! Distribution of investment between industries  
xSet EXOGINV # 'exogenous' investment industries #  
(EnerEleGasN, AguaEsgResid, Construo, ServicProf, AlojAlim,  
AtivImobili, AdmPublica, Educacao, Saude);  
xSubset EXOGINV is subset of IND;  
xSet ENDOGINV # 'endogenous' investment industries # = IND - EXOGINV;  
swap x2tot(ENDOGINV) = finv1(ENDOGINV);  
swap x2tot(EXOGINV) = finv2(EXOGINV);

! swaps to switch to long-run closure  
swap realwage = employ\_i;  
swap x2tot\_i = invslack;  
swap x3tot = delB;  
swap x1cap = gret;  
swap finv1(ENDOGINV) = finv3(ENDOGINV); !\*! fixed investment/capital ratios

verbal description =  
Group 2: deforestation increases agricultural land: longrun closure;

shock x1Ind("Agricultura") = 0.8;  
shock x1Ind("Pecuarria") = 1.8;

contBOT	-0.0148	Contribution of BOT to real expenditure-side GDP (change)	contGDPexp	
delB	0.0000	(Nominal balance of trade)/{nominal GDP} (change)	Consumption	-0.6250
delV0tar_c	-140.2251	Aggregate tariff revenue (change)	Investment	-0.1523
delV0tax_csi	-7069.6670	Aggregate revenue from all indirect taxes (change)	Government	0.4101
delV1tax_csi	-988.4549	Aggregate revenue from indirect taxes on intermediate (change)	Stocks	0.0000
delV2tax_csi	-215.9713	Aggregate revenue from indirect taxes on investment (change)	Exports	-0.0791
delV3tax_cs	-5571.0176	Aggregate revenue from indirect taxes on households (change)	Imports	0.0642
delV4tax_c	-0.4194	Aggregate revenue from indirect taxes on export (change)		
delV5tax_cs	31.8219	Aggregate revenue from indirect taxes on government (change)		
employ_i	0.0000	Aggregate employment: wage bill weights	contGDPinc	
f1lab_io	0.3296	Overall wage shifter	Land	0.0000
f2tot	0.3302	Ratio, investment/consumption	Labour	0.0000
f3tot	-0.7947	Ratio, consumption/ GDP	Capital	-0.2522
f5tot	2.0000	Overall shift term for government demands	IndTax	-0.1300
f5tot2	3.1055	Ratio between f5tot and x3tot	TechChange	0.0000
invslack	0.0000	Investment slack variable for exogenizing aggregate inve		
p0cif_c	0.0000	Imports price index, C.I.F., local currency		
p0gdpexp	0.1855	GDP price index, expenditure side		
p0gne	0.1688	GNE price index		
p0imp_c	0.0000	Duty-paid imports price index, local currency		
p0realdev	-0.1852	Real devaluation		
p0toft	0.1470	Terms of trade		
p1cap_i	0.2328	Average capital rental		
p1lab_io	0.4125	Average nominal wage		
p1lnd_i	-1.5577	Average land rental		
p1prim_i	0.2833	Index of factor cost		
p2tot_i	0.2328	Aggregate investment price index		
p3tot	0.0827	Consumer price index		
p4_ntrad	0.0000	Price, collective export aggregate		
p4tot	0.1470	Exports price index, local currency		
p5tot	0.3477	Government price index		
p6tot	0.1665	Inventories price index		
phi	0.0000	Exchange rate, local currency/\$world		
q	0.0000	Number of households		
realwage	0.3296	Average real wage		
utility	-2.6588	Utility per household		
w0cif_c	-0.5689	C.I.F. local currency value of imports		
w0gdpexp	-0.1973	Nominal GDP from expenditure side		
w0gdpinc	-0.1973	Nominal GDP from income side		
w0gne	-0.1973	Nominal GNE		
w0imp_c	-0.5733	Value of imports plus duty		
w0tax_csi	-1.0928	Aggregate revenue from all indirect taxes		
w1cap_i	-0.3955	Aggregate payments to capital		
w1lab_io	0.4125	Aggregate payments to labour		
w1lnd_i	-1.5577	Aggregate payments to land		
w1oct_i	0.0000	Aggregate "other cost" ticket payments		
w1prim_i	-0.0196	Aggregate primary factor payments		
w2tot_i	-0.5144	Aggregate nominal investment		
w3lux	-2.5653	Total nominal supernumerary household expenditure		
w3tot	-0.9904	Nominal total household consumption		
w4tot	-0.5860	Local currency border value of exports		
w5tot	2.3546	Aggregate nominal value of government demands		
w6tot	0.1665	Aggregate nominal value of inventories		
x0cif_c	-0.5689	Import volume index, C.I.F. weights		
x0gdpexp	-0.3821	Real GDP from expenditure side		



x0gdpinc	-0.3821	Decomposition of real GDP from income side
x0gne	-0.3655	Real GNE
x0imp_c	-0.5733	Import volume index, duty-paid weights
x1cap_i	-0.6268	Aggregate capital stock, rental weights
x1lnd_i	0.0000	Aggregate land stock, rental weights
x1prim_i	-0.3020	Aggregate effective primary factor use
x2tot_i	-0.7455	Aggregate real investment expenditure
x3tot	-1.0722	Real household consumption
x4_ntrad	0.0000	Quantity, collective export aggregate
x4tot	-0.7319	Export volume index
x5tot	2.0000	Aggregate real government demands
x6tot	0.0000	Aggregate real inventories
x0gdpfac	-0.3020	Real GDP at factor cost (inputs) = x1prim_i

## 9 IND variables

	employ	gret	p1cap	p1mat	p1prim	p1tot	p2tot	x1tot	x2tot
Agricultura	-0.6597	0.0000	0.2328	0.1671	-0.3206	-0.1231	0.2328	-0.4630	-0.6117
Pecuaria	-0.8021	0.0000	0.2328	0.1297	-0.3449	-0.1247	0.2328	-0.5991	-0.7541
PrFloPesSil	-0.8439	0.0000	0.2328	-0.0002	-0.5903	-0.4338	0.2328	-0.5749	-0.7960
ExtMinNMet	-0.9499	0.0000	0.2328	0.2051	0.0549	0.1390	0.2328	-0.7270	-0.8381
ExtPetrGas	-1.0670	0.0000	0.2328	0.1851	0.0581	0.1167	0.2328	-0.6745	-0.8683
ExtMinFerro	-0.7052	0.0000	0.2328	0.1946	-0.0315	0.0491	0.2328	-0.4276	-0.5931
ExtMMetNF	-0.9940	0.0000	0.2328	0.1875	0.0572	0.1431	0.2328	-0.7727	-0.8822
AbateCarne	-0.6170	0.0000	0.2328	0.0383	0.3512	0.0839	0.2328	-0.5727	-0.4869
FabRefAcu	-0.2886	0.0000	0.2328	0.0077	0.3549	0.0794	0.2328	-0.2468	-0.1581
OutAliment	-0.6801	0.0000	0.2328	0.1025	0.3426	0.1439	0.2328	-0.6297	-0.5502
Bebidas	-1.0513	0.0000	0.2328	0.2228	0.2894	0.2440	0.2328	-0.9627	-0.9219
Fumo	-0.9429	0.0000	0.2328	0.0553	0.2915	0.1176	0.2328	-0.8557	-0.8133
TexVestCalc	-1.0646	0.0000	0.2328	0.1995	0.3514	0.2546	0.2328	-1.0375	-0.9848
MadPapel	-0.8674	0.0000	0.2328	0.1416	0.3303	0.1989	0.2328	-0.7668	-0.6470
ImpRGrava	-0.6154	0.0000	0.2328	0.2310	0.3336	0.2766	0.2328	-0.5336	-0.4289
RefPetCoq	-0.7787	0.0000	0.2328	0.0889	0.2792	0.1021	0.2328	-0.6918	-0.6614
FabBiocom	-2.0657	0.0000	0.2328	0.0210	0.3231	0.0859	0.2328	-2.0107	-1.9551
Quimicos	-0.7305	0.0000	0.2328	0.1729	0.3155	0.2073	0.2328	-0.6701	-0.6185
FabBorPlast	-0.9136	0.0000	0.2328	0.1799	0.3482	0.2283	0.2328	-0.8476	-0.7289
FabMinNMet	-0.7443	0.0000	0.2328	0.2081	0.3311	0.2503	0.2328	-0.6936	-0.6323
Metalurgia	-0.8968	0.0000	0.2328	0.1749	0.3358	0.2041	0.2328	-0.8491	-0.7849
FabProdMet	-0.8063	0.0000	0.2328	0.2040	0.3387	0.2554	0.2328	-0.7603	-0.6943
FabMaqEq	-0.9390	0.0000	0.2328	0.1752	0.3499	0.2211	0.2328	-0.8551	-0.6975
TransEq	-0.9593	0.0000	0.2328	0.2079	0.3270	0.2388	0.2328	-0.9089	-0.8533
FabOutr	-0.7982	0.0000	0.2328	0.1941	0.3097	0.2442	0.2328	-0.7455	-0.7061
EnerEleGasN	-0.8017	0.0000	0.2328	0.2086	0.2649	0.2338	0.2328	-0.7127	-0.7455
AguaEsgResid	-0.4583	0.0000	0.2328	0.2326	0.2942	0.2668	0.2328	-0.3867	-0.7455
Construo	-0.7446	0.0000	0.2328	0.2239	0.3046	0.2610	0.2328	-0.6773	-0.7455
Comerc	-0.9399	0.0000	0.2328	0.2475	0.3160	0.2914	0.2328	-0.8542	-0.7801
TranspCorr	-1.5227	0.0000	0.2328	0.1922	0.3286	0.2528	0.2328	-1.3953	-1.2495
AlojAlim	-0.8225	0.0000	0.2328	0.1872	0.3119	0.2491	0.2328	-0.7599	-0.7455
Telecomun	-0.8756	0.0000	0.2328	0.2608	0.2811	0.2694	0.2328	-0.7574	-0.7139
ServicProf	-0.6399	0.0000	0.2328	0.2647	0.3182	0.2982	0.2328	-0.5803	-0.7455
AtivImobili	-1.1046	0.0000	0.2328	0.2720	0.2353	0.2380	0.2328	-0.9945	-0.7455
AdmPublica	1.9851	0.0000	0.2328	0.2558	0.3909	0.3516	0.2328	1.9978	-0.7455
Educacao	1.1389	0.0000	0.2328	0.2529	0.4020	0.3658	0.2328	1.1452	-0.7455
Saude	0.8653	0.0000	0.2328	0.2421	0.3733	0.3199	0.2328	0.8890	-0.7455
OutServPess	-0.2492	0.0000	0.2328	0.2313	0.3661	0.3134	0.2328	-0.2201	-0.1366

## 9 COM variables

	p0dom	p3_s	p4	x0com	x0dom	x0imp	x0loc	x3_s	x4
Agricultura	-0.1299	-0.0211	-0.1168	-0.4615	-0.7444	-0.8689	-0.7499	-0.9433	0.5862
Pecuaria	-0.1405	-0.0703	-0.1405	-0.5972	-0.6264	-0.9101	-0.6268	-0.9255	0.7053
PrFloPesSil	-0.4538	-0.3145	-0.4538	-0.5981	-0.6828	-1.3184	-0.7357	-0.8369	2.3000
ExtMinNMet	0.1295	0.0000	0.1310	-0.7275	-0.7325	-0.8053	-0.7576	-0.9509	-0.6527
ExtPetrGas	0.1083	0.0000	0.1083	-0.6797	-0.7291	-0.6130	-0.7029	-0.9509	-0.5398
ExtMinFerro	0.0480	0.0000	0.0684	-0.4282	-0.8388	-0.7491	-0.8385	-0.9509	-0.3414
ExtMMetNF	0.1420	0.0000	0.1420	-0.7721	-0.8047	-0.7487	-0.7908	-0.9509	-0.7070
AbateCarne	0.0808	-0.6680	0.0848	-0.5877	-0.6244	-0.5097	-0.6216	-0.7080	-0.4229
FabRefAcu	0.0698	-0.5341	0.0758	-0.4714	-0.6384	-0.3033	-0.6381	-0.7570	-0.3780
OutAliment	0.1373	-0.5647	0.1402	-0.6636	-0.6590	-0.4983	-0.6531	-0.7458	-0.6980
Bebidas	0.2442	0.2437	0.2442	-0.9467	-0.9386	-0.5544	-0.9081	-1.0387	-1.2119
Fumo	0.1158	0.1067	0.1158	-0.8521	-1.0034	-0.8728	-0.9656	-0.9894	-0.5769
TexVestCalc	0.2545	0.2503	0.2549	-1.0280	-1.0085	-0.6950	-0.9765	-1.0411	-1.2646
MadPapel	0.1942	0.2117	0.1944	-0.7685	-0.7172	-0.4080	-0.6976	-1.0272	-0.9664
ImpRGrava	0.2759	0.2643	0.2759	-0.5276	-0.5141	-0.4221	-0.5103	-1.0461	-1.3683
RefPetCoq	0.1389	-0.6467	0.1458	-0.6735	-0.6656	-0.8397	-0.6907	-0.7158	-0.7257
FabBiocom	0.0842	-0.6229	0.0859	-0.8064	-0.8142	-0.7100	-0.8056	-0.7245	-0.4286
Quimicos	0.2038	0.1969	0.2041	-0.6717	-0.6336	-0.5786	-0.6186	-1.0219	-1.0141
BorrPlast	0.2254	0.2172	0.2254	-0.8470	-0.8264	-0.5390	-0.7922	-1.0292	-1.1195
FabMinNMet	0.2507	0.2126	0.2508	-0.6974	-0.6637	-0.4536	-0.6518	-1.0275	-1.2448
Metalurgia	0.1969	0.2342	0.1971	-0.8521	-0.8117	-0.7127	-0.7944	-1.0353	-0.9797
FabProdMet	0.2559	0.2533	0.2559	-0.7707	-0.7470	-0.6446	-0.7383	-1.0421	-1.2699
FabMaqEq	0.2179	0.2093	0.2181	-0.8539	-0.8251	-0.7125	-0.7874	-1.0263	-1.0833
AutoCamUti	0.2048	0.1913	0.2048	-0.9257	-0.9164	-0.7496	-0.8888	-1.0198	-1.0176
CamOnibus	0.3215	0.3025	0.3214	-0.8665	-0.7654	-0.4256	-0.7485	-1.0598	-1.5917
PecasAutom	0.2345	0.0000	0.2346	-0.9084	-0.8606	-0.7897	-0.8473	-0.9509	-1.1645
AeroEmbOut	0.2226	0.2269	0.2226	-0.9145	-0.8323	-0.7665	-0.8110	-1.0326	-1.1056
FabOutr	0.2443	0.2466	0.2448	-0.7541	-0.7331	-0.3629	-0.6902	-1.0397	-1.2152
EnerEleGasN	0.2336	0.2341	0.2336	-0.7057	-0.7039	-0.4414	-0.6995	-1.0352	-1.1600
AguaEsgResid	0.2668	0.2668	0.0000	-0.3119	-0.3119	0.0000	-0.3119	-1.0470	0.0000
Construo	0.2605	0.0000	0.2605	-0.6741	-0.6711	0.3265	-0.6693	-0.9509	-1.2926
Comerc	0.2992	0.2992	0.2992	-0.8409	-0.8388	-0.0585	-0.8368	-2.1173	-1.4828
TranspCorr	0.2510	0.2435	0.2510	-1.3503	-1.3557	-0.2264	-1.3181	-3.1626	-1.2454
AlojAlim	0.2479	0.2354	0.2479	-0.7521	-0.7354	-0.3574	-0.6986	-1.0357	-1.2305
Telecomun	0.2691	0.2683	0.2691	-0.7575	-0.7545	-0.4321	-0.7500	-1.0475	-1.3349
ServicProf	0.2974	0.2967	0.2974	-0.5143	-0.4806	-0.1468	-0.4591	-1.0577	-1.4738
AtivImobili	0.3723	0.3723	0.3723	-0.8135	-0.7832	-0.2307	-0.7686	-1.0848	-1.8407
AlugImp	0.1887	0.1887	0.0000	-1.0189	-1.0189	0.0000	-1.0189	-1.0189	0.0000
AdmPublica	0.3560	0.0000	0.0000	2.0000	2.0000	0.0000	2.0000	-0.9509	0.0000
Educacao	0.3699	0.3683	0.3699	1.1542	1.1548	-0.5606	1.1526	-1.0834	-1.8294
Saude	0.3198	0.3197	0.3198	0.8904	0.8908	0.3958	0.8907	-1.0660	-1.5837
OutServPess	0.3135	0.3079	0.3135	-0.2353	-0.2272	-0.6838	-0.2323	-1.0618	-1.5529

fandecomp	LocalMarket	DomShare	Export	Total
Agricultura	-0.5905	0.0043	0.1246	-0.4615
Pecuaria	-0.6130	0.0004	0.0155	-0.5972
PrFloPesSil	-0.7150	0.0516	0.0653	-0.5981
ExtMinNMMet	-0.7106	0.0236	-0.0405	-0.7275
ExtPetrGas	-0.5196	-0.0194	-0.1407	-0.6797
ExtMinFerro	-0.1462	0.0000	-0.2819	-0.4282
ExtMMetNF	-0.5265	-0.0093	-0.2362	-0.7721
AbateCarne	-0.5084	-0.0023	-0.0770	-0.5877
FabRefAcu	-0.2288	-0.0001	-0.2424	-0.4714
OutAliment	-0.5754	-0.0052	-0.0830	-0.6636
Bebidas	-0.8811	-0.0298	-0.0358	-0.9467
Fumo	-0.6229	-0.0245	-0.2046	-0.8521
TexVestCalc	-0.9021	-0.0297	-0.0962	-1.0280
MadPapel	-0.5539	-0.0156	-0.1990	-0.7685
ImpRGrava	-0.5022	-0.0038	-0.0216	-0.5276
RefPetCoq	-0.6000	0.0219	-0.0954	-0.6735
FabBiocom	-0.7893	-0.0085	-0.0086	-0.8064
Quimicos	-0.5567	-0.0135	-0.1014	-0.6717
BorrPlast	-0.7364	-0.0320	-0.0787	-0.8470
FabMinNMMet	-0.6140	-0.0112	-0.0722	-0.6974
Metalurgia	-0.6030	-0.0131	-0.2360	-0.8521
FabProdMet	-0.7048	-0.0084	-0.0575	-0.7707
FabMaqEq	-0.6995	-0.0336	-0.1208	-0.8539
AutoCamUti	-0.8068	-0.0251	-0.0938	-0.9257
CamOnibus	-0.6569	-0.0148	-0.1948	-0.8665
PecasAutom	-0.7143	-0.0113	-0.1828	-0.9084
AeroEmbOut	-0.5670	-0.0149	-0.3325	-0.9145
FabOutr	-0.6600	-0.0412	-0.0529	-0.7541
EnerEleGasN	-0.6968	-0.0044	-0.0045	-0.7057
AguaEsgResid	-0.3119	0.0000	0.0000	-0.3119
Construo	-0.6661	-0.0019	-0.0061	-0.6741
Comerc	-0.8341	-0.0020	-0.0048	-0.8409
TranspCorr	-1.2528	-0.0360	-0.0614	-1.3503
AlojAlim	-0.6748	-0.0356	-0.0417	-0.7521
Telecomun	-0.7461	-0.0044	-0.0070	-0.7575
ServicProf	-0.4435	-0.0208	-0.0499	-0.5143
AtivImobili	-0.7465	-0.0142	-0.0528	-0.8135
AlugImp	-1.0189	0.0000	0.0000	-1.0189
AdmPublica	2.0000	0.0000	0.0000	2.0000
Educacao	1.1524	0.0022	-0.0004	1.1542
Saude	0.8906	0.0000	-0.0003	0.8904
OutServPess	-0.2309	0.0051	-0.0095	-0.2353

SalesDecom	Interm	Invest	HouseH	Export	GovGE	Stocks	Margins
Agricultura	-0.3825	-0.0020	-0.2034	0.1246	0.0018	0.0000	0.0000
Pecuaria	-0.4086	-0.0842	-0.1199	0.0155	0.0001	0.0000	0.0000
PrFloPesSil	-0.3220	-0.0544	-0.2872	0.0653	0.0002	0.0000	0.0000
ExtMinNMet	-0.6870	0.0000	0.0000	-0.0405	0.0000	0.0000	0.0000
ExtPetrGas	-0.4812	-0.0579	0.0000	-0.1407	0.0000	0.0000	0.0000
ExtMinFerro	-0.1463	0.0000	0.0000	-0.2819	0.0000	0.0000	0.0000
ExtMMetNF	-0.5358	0.0000	0.0000	-0.2362	0.0000	0.0000	0.0000
AbateCarne	-0.0802	0.0000	-0.4311	-0.0770	0.0005	0.0000	0.0000
FabRefAcu	-0.1412	0.0000	-0.0878	-0.2424	0.0001	0.0000	0.0000
OutAliment	-0.1632	0.0000	-0.4178	-0.0830	0.0003	0.0000	0.0000
Bebidas	-0.3531	0.0000	-0.5578	-0.0358	0.0000	0.0000	0.0000
Fumo	-0.0830	0.0000	-0.5645	-0.2046	0.0000	0.0000	0.0000
TexVestCalc	-0.2821	0.0000	-0.6498	-0.0962	0.0001	0.0000	0.0000
MadPapel	-0.4707	-0.0007	-0.0980	-0.1990	0.0000	0.0000	0.0000
ImpRGrava	-0.1640	0.0000	-0.3420	-0.0216	0.0000	0.0000	0.0000
RefPetCoq	-0.1797	0.0000	-0.3985	-0.0954	0.0000	0.0000	0.0000
FabBiocom	-0.7053	0.0000	-0.0925	-0.0086	0.0000	0.0000	0.0000
Quimicos	-0.3760	0.0000	-0.2301	-0.1014	0.0357	0.0000	0.0000
BorrPlast	-0.6794	0.0000	-0.0889	-0.0787	0.0000	0.0000	0.0000
FabMinNMet	-0.6115	0.0000	-0.0137	-0.0722	0.0000	0.0000	0.0000
Metalurgia	-0.6134	0.0000	-0.0027	-0.2360	0.0000	0.0000	0.0000
FabProdMet	-0.5536	-0.0621	-0.0975	-0.0575	0.0000	0.0000	0.0000
FabMaqEq	-0.2243	-0.3128	-0.1958	-0.1208	0.0000	0.0000	0.0000
AutoCamUti	-0.0111	-0.2584	-0.5625	-0.0937	0.0000	0.0000	0.0000
CamOnibus	-0.0942	-0.5626	-0.0149	-0.1948	0.0000	0.0000	0.0000
PecasAutom	-0.7255	0.0000	0.0000	-0.1828	0.0000	0.0000	0.0000
AeroEmbOut	-0.1638	-0.1551	-0.2630	-0.3325	0.0000	0.0000	0.0000
FabOutr	-0.3011	-0.1019	-0.2982	-0.0529	0.0000	0.0000	0.0000
EnerEleGasN	-0.3969	0.0000	-0.3043	-0.0045	0.0000	0.0000	0.0000
AguaEsgResid	0.1165	0.0000	-0.4284	0.0000	0.0000	0.0000	0.0000
Construo	-0.0500	-0.6180	0.0000	-0.0061	0.0000	0.0000	0.0000
Comerc	-0.0461	0.0000	-0.1037	-0.0048	0.0000	0.0000	-0.6863
TranspCorr	-0.4262	0.0000	-0.7504	-0.0614	0.0000	0.0000	-0.1123
AlojAlim	0.0755	0.0000	-0.7859	-0.0417	0.0000	0.0000	0.0000
Telecomun	-0.3236	0.0000	-0.4269	-0.0070	0.0000	0.0000	0.0000
ServicProf	-0.2286	-0.0584	-0.2169	-0.0499	0.0396	0.0000	0.0000
AtivImobili	-0.3002	0.0000	-0.4605	-0.0528	0.0000	0.0000	0.0000
AlugImp	0.0000	0.0000	-1.0189	0.0000	0.0000	0.0000	0.0000
AdmPublica	0.0000	0.0000	0.0000	0.0000	2.0000	0.0000	0.0000
Educacao	-0.0094	0.0000	-0.2686	-0.0004	1.4326	0.0000	0.0000
Saude	0.0492	0.0000	-0.3644	-0.0003	1.2059	0.0000	0.0000
OutServPess	-0.0481	0.0000	-0.6658	-0.0095	0.4880	0.0000	0.0000

! Command file for ORANIG model, long-run closure

check-on-read elements = warn; ! very often needed  
 cpu=yes ; ! (Optional) Reports CPU times for various stages  
 log file = yes; ! Optional  
 auxiliary files = oranig; ! needed by GEMSIM

! Solution method  
 method = GRAGG ;  
 steps = 2 4 6 ;  
 !method = johansen; ! alternative to above

! Data and summary file  
 !file basedata = basedata.har ;  
 file basedata = aggnat.har ;  
 updated file basedata =<cmf>.upd;  
 file summary = summary.har;

! Automatic closure generated by TABmate Tools...Closure command

! Please do not edit -- instead, add swap statements underneath.

!	Variable	Size	
Exogenous	a0com ; !	COM	Commodity CET technology shifter (negative=good)
Exogenous	a1cap ; !	IND	Capital-augmenting technical change
Exogenous	a1lab_o ; !	IND	Labor-augmenting technical change
Exogenous	a1ld ; !	IND	Land-augmenting technical change
Exogenous	a1prim ; !	IND	All factor augmenting technical change
Exogenous	a1tot ; !	IND	All input augmenting technical change
Exogenous	a2tot ; !	IND	Neutral technical change - investment
Exogenous	a3_s ; !	COM	Taste change, household imp/dom composite
Exogenous	capslack ; !	1	Slack variable to allow fixing aggregate capital
Exogenous	delPTXRATE ; !	IND*DTAX	Change in rate of production tax
Exogenous	f0tax_s ; !	COM*TAXS	General sales tax shifter
Exogenous	f1lab_io ; !	1	Overall wage shifter
Exogenous	f1oct ; !	IND	Shift in price of "other cost" tickets
Exogenous	f1tax_csi ; !	1	Uniform % change in powers of taxes on intermediate usage
Exogenous	f2tax_csi ; !	1	Uniform % change in powers of taxes on investment
Exogenous	f3tax_cs ; !	1	Uniform % change in powers of taxes on household usage
Exogenous	f3tax_s ; !	COM*TAXS	household sales tax shifter
Exogenous	f4p ; !	COM	Price (upward) shift in export demand schedule
Exogenous	f4p_ntrad ; !	1	Uniform upward (price) demand shift for collective exports
Exogenous	f4q ; !	COM	Quantity (right) shift in export demands
Exogenous	f4q_ntrad ; !	1	Uniform right (quantity) demand shift for collective exports
Exogenous	f4tax_ntrad ; !	1	Uniform % change in powers of taxes on nontradtnl exports
Exogenous	f4tax_trad ; !	TRADEXP*TAXS	% change in powers of taxes on tradtnl exports
Exogenous	f5 ; !	COM*SRC	Government demand shift
Exogenous	f5tax_cs ; !	1	Uniform % change in powers of taxes on government usage
Exogenous	f5tot2 ; !	1	Ratio between f5tot and x3tot
Exogenous	fx6 ; !	COM*SRC	Shifter on rule for stocks
Exogenous	invslack ; !	1	Investment slack variable for exogenizing aggregate investment
Exogenous	pf0cif ; !	COM	C.I.F. foreign currency import prices
Exogenous	phi ; !	1	Exchange rate, local currency/\$world
Exogenous	q ; !	1	Number of households
Exogenous	t0imp ; !	COM	Power of tariff
Exogenous	w3lux ; !	1	Total nominal supernumerary household expenditure
Exogenous	x1cap ; !	IND	Current capital stock

Exogenous x1Ind ; ! IND Use of land  
Exogenous x2tot ; ! IND Investment by using industry  
Rest endogenous; ! end of TABmate automatic closure

swap f1lab\_io = realwage;  
! swaps for exogenous settings of real GDP from the expenditure side  
swap invslack = x2tot\_i;  
swap w3lux = x3tot;  
swap f5tot2 = x5tot;  
swap fx6 = delx6;

! Distribution of investment between industries  
xSet EXOGINV # 'exogenous' investment industries #  
(EnerEleGasN, AguaEsgResid, Construo, ServicProf, AlojAlim,  
AtivImobili, AdmPublica, Educacao, Saude);  
xSubset EXOGINV is subset of IND;  
xSet ENDOGINV # 'endogenous' investment industries # = IND - EXOGINV;  
swap x2tot(ENDOGINV) = finv1(ENDOGINV);  
swap x2tot(EXOGINV) = finv2(EXOGINV);

! swaps to switch to long-run closure  
swap realwage = employ\_i;  
swap x2tot\_i = invslack;  
swap x3tot = delB;  
swap x1cap = gret;  
swap finv1(ENDOGINV) = finv3(ENDOGINV); !\*! fixed investment/capital ratios

! Introduce subset to define commodities whose sales taxes are cut  
xSet TAXCUTS # commodities whose sales taxes are cut #  
(AbateCarne, FabRefAcu, OutAliment, RefPetCoq, FabBiocom);  
xSubset TAXCUTS is subset of COM;

verbal description =  
Group 4: government economic program: longrun closure;

shock x5tot = 2;  
!shock realwage = 1;  
shock f3tax\_s(TAXCUTS,TAXS) = uniform -1;

subtotal x5tot = govspend;  
!subtotal realwage = minwage;  
subtotal f3tax\_s = taxcut;

contBOT	-0.0108	Contribution of BOT to real expenditure-side GDP (change)	contGDPexp	
delB	0.0004	(Nominal balance of trade)/{nominal GDP} (change)	Consumption	0.0000
delV0tar_c	-2027.2670	Aggregate tariff revenue (change)	Investment	0.0000
delV0tax_csi	-1371.8340	Aggregate revenue from all indirect taxes (change)	Government	0.0000
delV1tax_csi	347.0216	Aggregate revenue from indirect taxes on intermediate (change)	Stocks	0.0000
delV2tax_csi	-41.2879	Aggregate revenue from indirect taxes on investment (change)	Exports	0.0362
delV3tax_cs	346.8242	Aggregate revenue from indirect taxes on households (change)	Imports	-0.0471
delV4tax_c	-0.2733	Aggregate revenue from indirect taxes on export (change)		
delV5tax_cs	1.9152	Aggregate revenue from indirect taxes on government (change)		
employ_i	-0.0489	Aggregate employment: wage bill weights	contGDPinc	
f1lab_io	0.0000	Overall wage shifter	Land	0.0000
f2tot	0.0000	Ratio, investment/consumption	Labour	-0.0202
f3tot	-0.0110	Ratio, consumption/ GDP	Capital	0.0000
f5tot	0.0000	Overall shift term for government demands	IndTax	0.0094
f5tot2	0.0000	Ratio between f5tot and x3tot	TechChange	0.0000
invslack	0.8989	Investment slack variable for exogenizing aggregate inve		
p0cif_c	0.0000	Imports price index, C.I.F., local currency		
p0gdpexp	0.1838	GDP price index, expenditure side		
p0gne	0.1289	GNE price index		
p0imp_c	-0.4667	Duty-paid imports price index, local currency		
p0realdev	-0.1834	Real devaluation		
p0toft	0.5013	Terms of trade		
p1cap_i	0.2973	Average capital rental		
p1lab_io	0.1619	Average nominal wage		
p1lnd_i	2.3108	Average land rental		
p1prim_i	0.2737	Index of factor cost		
p2tot_i	0.0151	Aggregate investment price index		
p3tot	0.1619	Consumer price index		
p4_ntrad	0.0000	Price, collective export aggregate		
p4tot	0.5013	Exports price index, local currency		
p5tot	0.1501	Government price index		
p6tot	0.0984	Inventories price index		
phi	0.0000	Exchange rate, local currency/\$world		
q	0.0000	Number of households		
realwage	0.0000	Average real wage		
utility	0.0000	Utility per household		
w0cif_c	0.4166	C.I.F. local currency value of imports		
w0gdpexp	0.1729	Nominal GDP from expenditure side		
w0gdpinc	0.1729	Nominal GDP from income side		
w0gne	0.1289	Nominal GNE		
w0imp_c	-0.0405	Value of imports plus duty		
w0tax_csi	-0.2121	Aggregate revenue from all indirect taxes		
w1cap_i	0.2973	Aggregate payments to capital		
w1lab_io	0.1129	Aggregate payments to labour		
w1lnd_i	2.3108	Aggregate payments to land		
w1oct_i	0.0000	Aggregate "other cost" ticket payments		
w1prim_i	0.2493	Aggregate primary factor payments		
w2tot_i	0.0151	Aggregate nominal investment		
w3lux	0.1580	Total nominal supernumerary household expenditure		
w3tot	0.1619	Nominal total household consumption		
w4tot	0.8377	Local currency border value of exports		
w5tot	0.1501	Aggregate nominal value of government demands		
w6tot	0.0984	Aggregate nominal value of inventories		
x0cif_c	0.4166	Import volume index, C.I.F. weights		
x0gdpexp	-0.0108	Real GDP from expenditure side		

x0gdpinc	-0.0108	Decomposition of real GDP from income side
x0gne	0.0000	Real GNE
x0imp_c	0.4282	Import volume index, duty-paid weights
x1cap_i	0.0000	Aggregate capital stock, rental weights
x1lnd_i	0.0000	Aggregate land stock, rental weights
x1prim_i	-0.0243	Aggregate effective primary factor use
x2tot_i	0.0000	Aggregate real investment expenditure
x3tot	0.0000	Real household consumption
x4_ntrad	0.0000	Quantity, collective export aggregate
x4tot	0.3347	Export volume index
x5tot	0.0000	Aggregate real government demands
x6tot	0.0000	Aggregate real inventories
x0gdpfac	-0.0243	Real GDP at factor cost (inputs) = x1prim_i

## 9 IND variables

	employ	gret	p1cap	p1mat	p1prim	p1tot	p2tot	x1tot	x2tot
Agricultura	1.3343	5.1859	5.2018	0.3394	4.1197	2.5892	0.0151	0.2795	3.0883
Pecuaria	0.3904	1.6026	1.6179	0.5201	1.1582	0.8622	0.0151	0.1225	0.7569
PrFloPesSil	0.4076	1.6670	1.6824	0.5293	1.4794	1.2274	0.0151	0.0540	0.7990
ExtMinNMet	-0.1219	-0.0469	-0.0318	0.1162	0.0510	0.0875	0.0151	-0.0522	-0.3257
ExtPetrGas	0.0126	0.1581	0.1732	0.0920	0.1710	0.1345	0.0151	0.0025	-0.1909
ExtMinFerro	-0.1761	-0.1331	-0.1180	0.1385	-0.0895	-0.0082	0.0151	-0.0180	-0.3825
ExtMMetNF	-0.3132	-0.3506	-0.3356	0.1439	-0.1109	0.0571	0.0151	-0.1418	-0.5257
AbateCarne	-0.7228	-0.8434	-0.8284	0.5203	-0.1764	0.4188	0.0151	-0.4772	-0.8507
FabRefAcu	-5.4666	-7.2760	-7.2620	1.7309	-2.2621	0.9057	0.0151	-3.7608	-5.1441
OutAliment	-1.3956	-1.7628	-1.7479	0.9924	-0.5833	0.7211	0.0151	-0.8566	-1.4584
Bebidas	-0.1397	-0.0448	-0.0297	0.2742	0.0306	0.1967	0.0151	-0.0441	-0.3244
Fumo	-2.6379	-3.4544	-3.4398	1.3357	-2.2737	0.3838	0.0151	-0.8724	-2.5816
TexVestCalc	-0.1608	-0.2107	-0.1957	0.2322	0.0404	0.1626	0.0151	-0.1062	-0.4336
MadPapel	-0.5028	-0.2595	-0.2444	0.2345	-0.0240	0.1561	0.0151	-0.2733	-0.4657
ImpRGrava	-0.0438	0.1048	0.1200	0.0944	0.1435	0.1162	0.0151	-0.0246	-0.2259
RefPetCoq	1.3228	2.1607	2.1762	0.4035	1.6526	0.4904	0.0151	0.3396	1.1218
FabBiocom	-3.1088	-4.7498	-4.7354	1.6199	-2.2929	0.7788	0.0151	-1.5823	-3.4463
Quimicos	-0.0564	0.0571	0.0722	0.0987	0.1135	0.1023	0.0151	-0.0260	-0.2573
FabBorPlast	-0.1545	-0.0020	0.0131	0.1261	0.1087	0.1211	0.0151	-0.0993	-0.2962
FabMinNMet	-0.0776	0.0235	0.0386	0.1235	0.1061	0.1175	0.0151	-0.0425	-0.2794
Metalurgia	-0.0995	-0.0113	0.0038	0.0866	0.0945	0.0880	0.0151	-0.0571	-0.3023
FabProdMet	-0.0139	0.1246	0.1398	0.0932	0.1528	0.1159	0.0151	-0.0082	-0.2129
FabMaqEq	-0.0960	0.0761	0.0912	0.0757	0.1373	0.0919	0.0151	-0.0626	-0.2448
TransEq	0.9201	1.6943	1.7096	-0.2931	0.8964	0.0158	0.0151	0.4806	0.8169
FabOutr	-0.1081	-0.0623	-0.0472	0.1106	0.0423	0.0809	0.0151	-0.0463	-0.3359
EnerEleGasN	0.0208	0.1809	0.1960	0.1338	0.1899	0.1589	0.0151	0.0037	0.0000
AguaEsgResid	-0.0428	0.0766	0.0917	0.1273	0.1157	0.1209	0.0151	-0.0146	0.0000
Construo	-0.0028	0.1422	0.1574	0.1215	0.1592	0.1388	0.0151	-0.0011	0.0000
Comerc	0.0258	0.1755	0.1906	0.0812	0.1773	0.1427	0.0151	0.0120	-0.1794
TranspCorr	-0.3080	-0.0528	-0.0377	0.1804	0.0688	0.1308	0.0151	-0.1644	-0.3296
AlojAlim	-0.1363	-0.0698	-0.0547	0.3222	0.0407	0.1825	0.0151	-0.0601	0.0000
Telecomun	-0.0647	0.0755	0.0907	0.0920	0.1098	0.0996	0.0151	-0.0174	-0.2452
ServicProf	-0.1111	-0.0275	-0.0124	0.0889	0.0705	0.0774	0.0151	-0.0529	0.0000
AtivImobili	-0.0147	0.1234	0.1386	0.0885	0.1389	0.1352	0.0151	-0.0002	0.0000
AdmPublica	0.0003	0.1473	0.1624	0.1247	0.1620	0.1511	0.0151	0.0003	0.0000
Educacao	-0.0049	0.1385	0.1536	0.1403	0.1614	0.1563	0.0151	-0.0046	0.0000
Saude	0.0014	0.1491	0.1642	0.1233	0.1624	0.1465	0.0151	0.0011	0.0000
OutServPess	-0.0114	0.1286	0.1438	0.1245	0.1572	0.1444	0.0151	-0.0085	-0.2102



## 9 COM variables

	p0dom	p3_s	p4	x0com	x0dom	x0imp	x0loc	x3_s	x4
Agricultura	2.7098	1.9704	2.6312	0.3644	-1.3863	3.7129	-1.1642	-0.6588	6.8486
Pecuaria	0.7674	0.6641	0.7674	0.0300	-0.3524	1.1811	-0.3503	-0.1864	17.1027
PrFloPesSil	1.2263	1.0050	1.2263	0.0556	-0.3658	1.6439	-0.1997	-0.3108	14.4721
ExtMinNMet	0.0590	0.0000	0.0596	-0.0730	-0.0581	-0.0377	-0.0511	0.0586	-0.2974
ExtPetrGas	0.1273	0.0000	0.1273	-0.0012	0.2219	0.3599	0.2530	0.0586	-0.6339
ExtMinFerro	-0.0086	0.0000	0.0021	-0.0182	-0.0557	-0.0397	-0.0557	0.0586	-0.0103
ExtMMetNF	0.0565	0.0000	0.0565	-0.1380	-0.0656	-0.0381	-0.0588	0.0586	-0.2821
AbateCarne	0.4085	0.3407	0.4033	-0.4697	-0.1307	0.4684	-0.1163	-0.0675	-1.9925
FabRefAcu	1.0146	0.7267	0.9915	-3.4076	-0.8932	-0.1895	-0.8926	-0.2093	-4.8136
OutAliment	0.7641	0.5792	0.7526	-0.6841	-0.2799	0.5980	-0.2478	-0.1552	-3.6794
Bebidas	0.1944	0.1719	0.1944	-0.0812	-0.0543	0.2068	-0.0335	-0.0052	-0.9666
Fumo	0.3867	0.2963	0.3867	-0.8681	-0.2948	0.4513	-0.0792	-0.0511	-1.9111
TexVestCalc	0.1644	0.1404	0.1640	-0.1077	-0.0494	0.1599	-0.0280	0.0065	-0.8162
MadPapel	0.1590	0.1498	0.1590	-0.2679	-0.1322	0.0343	-0.1217	0.0030	-0.7912
ImpRGrava	0.1165	0.1108	0.1165	-0.0278	-0.0189	0.1021	-0.0139	0.0174	-0.5806
RefPetCoq	-0.0606	-0.0265	-0.0528	0.0641	0.0338	-0.0791	0.0175	0.0684	0.2645
FabBiocom	0.7423	0.5556	0.7371	-0.0316	0.0420	0.3262	0.0654	-0.1466	-3.6056
Quimicos	0.0955	0.0874	0.0956	-0.0429	0.0052	-0.0115	0.0007	0.0261	-0.4764
BorrPlast	0.1170	0.1071	0.1170	-0.0924	-0.0553	0.2196	-0.0225	0.0188	-0.5830
FabMinNMet	0.1170	0.0950	0.1170	-0.0415	-0.0081	0.1102	-0.0014	0.0233	-0.5831
Metalurgia	0.0850	0.0991	0.0851	-0.0565	0.0603	0.0836	0.0644	0.0218	-0.4244
FabProdMet	0.1136	0.1106	0.1136	-0.0091	0.0174	0.0501	0.0202	0.0175	-0.5660
FabMaqEq	0.0891	0.0859	0.0892	-0.0598	-0.0115	0.0094	-0.0045	0.0267	-0.4446
AutoCamUti	-1.0631	-1.6417	-1.0631	-0.0628	-0.6262	4.5420	0.2091	0.6782	5.4895
CamOnibus	-0.6697	-0.7085	-0.6665	0.1274	-0.3290	6.7880	0.0146	0.3235	3.4001
PecasAutom	-0.4011	0.0000	-0.4009	0.2494	-0.0820	1.8427	0.2706	0.0586	2.0288
AeroEmbOut	5.4884	4.1179	5.4884	3.1826	-0.8187	1.1235	-0.2025	-1.4098	12.4853
FabOutr	0.0572	0.0765	0.0578	-0.0583	-0.0478	0.0055	-0.0416	0.0302	-0.2883
EnerEleGasN	0.1590	0.1588	0.1590	-0.0191	-0.0161	0.1897	-0.0127	-0.0003	-0.7914
AguaEsgResid	0.1208	0.1208	0.0000	-0.0147	-0.0147	0.0000	-0.0147	0.0138	0.0000
Construo	0.1390	0.0000	0.1390	-0.0046	-0.0014	0.1685	-0.0011	0.0586	-0.6921
Comerc	0.1228	0.1228	0.1228	-0.0163	-0.0144	0.0670	-0.0142	0.0260	-0.6118
TranspCorr	0.1312	0.1273	0.1312	-0.1609	-0.1354	0.3842	-0.1181	0.0346	-0.6534
AlojAlim	0.1837	0.1744	0.1837	-0.0579	-0.0279	0.1580	-0.0098	-0.0061	-0.9135
Telecomun	0.0997	0.0993	0.0997	-0.0175	-0.0149	0.1015	-0.0133	0.0217	-0.4968
ServicProf	0.0770	0.0768	0.0770	-0.0526	-0.0410	0.0302	-0.0364	0.0301	-0.3840
AtivImobili	0.1081	0.1081	0.1081	-0.0306	-0.0156	0.0851	-0.0129	0.0184	-0.5390
AlugImp	0.1451	0.1451	0.0000	0.0048	0.0048	0.0000	0.0048	0.0048	0.0000
AdmPublica	0.1506	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0586	0.0000
Educacao	0.1611	0.1604	0.1611	-0.0022	-0.0020	0.1886	-0.0018	-0.0009	-0.8014
Saude	0.1470	0.1470	0.1470	0.0013	0.0014	0.1118	0.0015	0.0041	-0.7317
OutServPess	0.1451	0.1425	0.1451	-0.0076	-0.0032	0.1825	-0.0011	0.0057	-0.7222

fandecamp	LocalMarket	DomShare	Export	Total
Agricultura	-0.9157	-0.1759	1.4560	0.3644
Pecuaria	-0.3426	-0.0021	0.3747	0.0300
PrFloPesSil	-0.1939	-0.1615	0.4110	0.0556
ExtMinNMet	-0.0479	-0.0066	-0.0185	-0.0730
ExtPetrGas	0.1870	-0.0230	-0.1652	-0.0012
ExtMinFerro	-0.0097	0.0000	-0.0085	-0.0182
ExtMMetNF	-0.0391	-0.0045	-0.0943	-0.1380
AbateCarne	-0.0951	-0.0118	-0.3627	-0.4697
FabRefAcu	-0.3201	-0.0002	-3.0872	-3.4076
OutAliment	-0.2183	-0.0283	-0.4375	-0.6841
Bebidas	-0.0325	-0.0201	-0.0285	-0.0812
Fumo	-0.0510	-0.1392	-0.6780	-0.8681
TexVestCalc	-0.0258	-0.0198	-0.0621	-0.1077
MadPapel	-0.0966	-0.0084	-0.1629	-0.2679
ImpRGrava	-0.0137	-0.0049	-0.0092	-0.0278
RefPetCoq	0.0152	0.0142	0.0348	0.0641
FabBiocom	0.0641	-0.0229	-0.0727	-0.0316
Quimicos	0.0006	0.0041	-0.0476	-0.0429
BorrPlast	-0.0209	-0.0305	-0.0410	-0.0924
FabMinNMet	-0.0014	-0.0063	-0.0338	-0.0415
Metalurgia	0.0488	-0.0031	-0.1023	-0.0565
FabProdMet	0.0192	-0.0027	-0.0256	-0.0091
FabMaqEq	-0.0040	-0.0062	-0.0496	-0.0598
AutoCamUti	0.1890	-0.7576	0.5057	-0.0628
CamOnibus	0.0128	-0.3015	0.4161	0.1274
PecasAutom	0.2277	-0.2968	0.3185	0.2494
AeroEmbOut	-0.1412	-0.4313	3.7551	3.1826
FabOutr	-0.0398	-0.0059	-0.0125	-0.0583
EnerEleGasN	-0.0126	-0.0034	-0.0031	-0.0191
AguaEsgResid	-0.0147	0.0000	0.0000	-0.0147
Construo	-0.0011	-0.0003	-0.0033	-0.0046
Comerc	-0.0141	-0.0002	-0.0020	-0.0163
TranspCorr	-0.1122	-0.0165	-0.0322	-0.1609
AlojAlim	-0.0095	-0.0175	-0.0310	-0.0579
Telecomun	-0.0133	-0.0016	-0.0026	-0.0175
ServicProf	-0.0352	-0.0044	-0.0130	-0.0526
AtivImobili	-0.0125	-0.0026	-0.0155	-0.0306
AlugImp	0.0048	0.0000	0.0000	0.0048
AdmPublica	0.0000	0.0000	0.0000	0.0000
Educacao	-0.0018	-0.0002	-0.0002	-0.0022
Saude	0.0015	0.0000	-0.0001	0.0013
OutServPess	-0.0011	-0.0021	-0.0044	-0.0076

SalesDecom	Interm	Invest	HouseH	Export	GovGE	Stocks	Margins
Agricultura	-0.8892	0.0000	-0.2024	1.4560	0.0000	0.0000	0.0000
Pecuaria	-0.3197	-0.0009	-0.0242	0.3747	0.0000	0.0000	0.0000
PrFloPesSil	-0.2184	0.0000	-0.1370	0.4110	0.0000	0.0000	0.0000
ExtMinNMet	-0.0545	0.0000	0.0000	-0.0185	0.0000	0.0000	0.0000
ExtPetrGas	0.1640	0.0000	0.0000	-0.1652	0.0000	0.0000	0.0000
ExtMinFerro	-0.0097	0.0000	0.0000	-0.0085	0.0000	0.0000	0.0000
ExtMMetNF	-0.0437	0.0000	0.0000	-0.0943	0.0000	0.0000	0.0000
AbateCarne	-0.0570	0.0000	-0.0499	-0.3627	0.0000	0.0000	0.0000
FabRefAcu	-0.2960	0.0000	-0.0243	-3.0872	0.0000	0.0000	0.0000
OutAliment	-0.1418	0.0000	-0.1048	-0.4375	0.0000	0.0000	0.0000
Bebidas	-0.0413	0.0000	-0.0113	-0.0285	0.0000	0.0000	0.0000
Fumo	-0.0878	0.0000	-0.1024	-0.6780	0.0000	0.0000	0.0000
TexVestCalc	-0.0380	0.0000	-0.0076	-0.0621	0.0000	0.0000	0.0000
MadPapel	-0.1050	0.0000	0.0000	-0.1629	0.0000	0.0000	0.0000
ImpRGrava	-0.0213	0.0000	0.0027	-0.0092	0.0000	0.0000	0.0000
RefPetCoq	-0.0087	0.0000	0.0381	0.0348	0.0000	0.0000	0.0000
FabBiocom	0.0614	0.0000	-0.0203	-0.0727	0.0000	0.0000	0.0000
Quimicos	-0.0005	0.0000	0.0052	-0.0476	0.0000	0.0000	0.0000
BorrPlast	-0.0512	0.0000	-0.0002	-0.0410	0.0000	0.0000	0.0000
FabMinNMet	-0.0076	0.0000	-0.0001	-0.0338	0.0000	0.0000	0.0000
Metalurgia	0.0457	0.0000	0.0001	-0.1023	0.0000	0.0000	0.0000
FabProdMet	0.0158	-0.0006	0.0014	-0.0256	0.0000	0.0000	0.0000
FabMaqEq	-0.0089	-0.0053	0.0040	-0.0496	0.0000	0.0000	0.0000
AutoCamUti	-0.0273	-0.2593	-0.2819	0.5057	0.0000	0.0000	0.0000
CamOnibus	-0.0765	-0.2121	-0.0001	0.4161	0.0000	0.0000	0.0000
PecasAutom	-0.0692	0.0000	0.0000	0.3185	0.0000	0.0000	0.0000
AeroEmbOut	-0.0644	-0.1217	-0.3863	3.7551	0.0000	0.0000	0.0000
FabOutr	-0.0512	-0.0007	0.0062	-0.0125	0.0000	0.0000	0.0000
EnerEleGasN	-0.0160	0.0000	-0.0001	-0.0031	0.0000	0.0000	0.0000
AguaEsgResid	-0.0203	0.0000	0.0056	0.0000	0.0000	0.0000	0.0000
Construo	-0.0014	0.0000	0.0000	-0.0033	0.0000	0.0000	0.0000
Comerc	-0.0109	0.0000	0.0013	-0.0020	0.0000	0.0000	-0.0048
TranspCorr	-0.0951	0.0000	0.0042	-0.0322	0.0000	0.0000	-0.0378
AlojAlim	-0.0138	0.0000	-0.0132	-0.0310	0.0000	0.0000	0.0000
Telecomun	-0.0235	0.0000	0.0087	-0.0026	0.0000	0.0000	0.0000
ServicProf	-0.0455	-0.0003	0.0061	-0.0130	0.0000	0.0000	0.0000
AtivImobili	-0.0230	0.0000	0.0078	-0.0155	0.0000	0.0000	0.0000
AlugImp	0.0000	0.0000	0.0048	0.0000	0.0000	0.0000	0.0000
AdmPublica	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Educacao	-0.0016	0.0000	-0.0004	-0.0002	0.0000	0.0000	0.0000
Saude	0.0001	0.0000	0.0014	-0.0001	0.0000	0.0000	0.0000
OutServPess	-0.0048	0.0000	0.0016	-0.0044	0.0000	0.0000	0.0000

! Command file for ORANIG model, short-run closure

check-on-read elements = warn; ! very often needed  
 cpu=yes ; ! (Optional) Reports CPU times for various stages  
 log file = yes; ! Optional  
 auxiliary files = oranig; ! needed by GEMSIM

! Solution method

method = GRAGG ;

steps = 2 4 6 ;

!method = johansen; ! alternative to above

! Data and summary file

!file basedata = basedata.har ;

file basedata = aggnat.har ;

updated file basedata =<cmf>.upd;

file summary = summary.har;

! Automatic closure generated by TABmate Tools...Closure command

! Please do not edit -- instead, add swap statements underneath.

! Variable Size

Exogenous	a0com ; ! COM	Commodity CET technology shifter (negative=good)
Exogenous	a1cap ; ! IND	Capital-augmenting technical change
Exogenous	a1lab_o ; ! IND	Labor-augmenting technical change
Exogenous	a1ld ; ! IND	Land-augmenting technical change
Exogenous	a1prim ; ! IND	All factor augmenting technical change
Exogenous	a1tot ; ! IND	All input augmenting technical change
Exogenous	a2tot ; ! IND	Neutral technical change - investment
Exogenous	a3_s ; ! COM	Taste change, household imp/dom composite
Exogenous	capslack ; ! 1	Slack variable to allow fixing aggregate capital
Exogenous	delPTXRATE ; ! IND*DTAX	Change in rate of production tax
Exogenous	f0tax_s ; ! COM*TAXS	General sales tax shifter
Exogenous	f1lab_io ; ! 1	Overall wage shifter
Exogenous	f1oct ; ! IND	Shift in price of "other cost" tickets
Exogenous	f1tax_csi ; ! 1	Uniform % change in powers of taxes on intermediate usage
Exogenous	f2tax_csi ; ! 1	Uniform % change in powers of taxes on investment
Exogenous	f3tax_cs ; ! 1	Uniform % change in powers of taxes on household usage
Exogenous	f3tax_s ; ! COM*TAXS	household sales tax shifter
Exogenous	f4p ; ! COM	Price (upward) shift in export demand schedule
Exogenous	f4p_ntrad ; ! 1	Uniform upward (price) demand shift for collective exports
Exogenous	f4q ; ! COM	Quantity (right) shift in export demands
Exogenous	f4q_ntrad ; ! 1	Uniform right (quantity) demand shift for collective exports
Exogenous	f4tax_ntrad ; ! 1	Uniform % change in powers of taxes on nontradtnl exports
Exogenous	f4tax_trad ; ! TRADEXP*TAXS	% change in powers of taxes on tradtnl exports
Exogenous	f5 ; ! COM*SRC	Government demand shift
Exogenous	f5tax_cs ; ! 1	Uniform % change in powers of taxes on government usage
Exogenous	f5tot2 ; ! 1	Ratio between f5tot and x3tot
Exogenous	fx6 ; ! COM*SRC	Shifter on rule for stocks
Exogenous	invslack ; ! 1	Investment slack variable for exogenizing aggregate investment
Exogenous	pf0cif ; ! COM	C.I.F. foreign currency import prices
Exogenous	phi ; ! 1	Exchange rate, local currency/\$world
Exogenous	q ; ! 1	Number of households
Exogenous	t0imp ; ! COM	Power of tariff
Exogenous	w3lux ; ! 1	Total nominal supernumerary household expenditure
Exogenous	x1cap ; ! IND	Current capital stock

Exogenous x1Ind ; ! IND Use of land  
Exogenous x2tot ; ! IND Investment by using industry  
Rest endogenous; ! end of TABmate automatic closure

```
swap f1lab_io = realwage;  
! swaps for exogenous settings of real GDP from the expenditure side  
swap invslack = x2tot_i;  
swap w3lux = x3tot;  
swap f5tot2 = x5tot;  
swap fx6 = delx6;
```

```
! Distribution of investment between industries  
xSet EXOGINV # 'exogenous' investment industries #  
(EnerEleGasN, AguaEsgResid, Construo, ServicProf, AlojAlim,  
AtivImobili, AdmPublica, Educacao, Saude);  
xSubset EXOGINV is subset of IND;  
xSet ENDOGINV # 'endogenous' investment industries # = IND - EXOGINV;  
swap x2tot(ENDOGINV) = finv1(ENDOGINV);  
swap x2tot(EXOGINV) = finv2(EXOGINV);
```

```
! Introduce subset to define agric commodities whose exports are shocked  
xSet EXPSHK # agric commodities whose exports are shocked #  
(Agricultura, Pecuaria, PrFloPesSil);  
xSubset EXPSHK is subset of COM;
```

```
verbal description =  
Group 5: Brazil joins CPTPP: DPSV shortrun closure;
```

```
shock f4p(EXPSHK) = uniform 4;  
shock f4p("AeroEmbOut") = 8;
```

```
shock t0imp("AutoCamUti") = -6;  
shock t0imp("CamOnibus") = -6;  
shock t0imp("PecasAutom") = -6;
```

```
subtotal f4p = expshk;  
subtotal t0imp = impshk;
```

contBOT	-0.3426	Contribution of BOT to real expenditure-side GDP (change)	contGDPexp	
delB	-0.0027	(Nominal balance of trade)/{nominal GDP} (change)	Consumption	0.0000
delV0tar_c	37.6308	Aggregate tariff revenue (change)	Investment	0.0000
delV0tax_csi	1558.2065	Aggregate revenue from all indirect taxes (change)	Government	0.4112
delV1tax_csi	1423.8076	Aggregate revenue from indirect taxes on intermediate (change)	Stocks	0.0000
delV2tax_csi	405.1057	Aggregate revenue from indirect taxes on investment (change)	Exports	-0.3061
delV3tax_cs	-700.8308	Aggregate revenue from indirect taxes on households (change)	Imports	-0.0365
delV4tax_c	-1.5493	Aggregate revenue from indirect taxes on export (change)		
delV5tax_cs	48.4029	Aggregate revenue from indirect taxes on government (change)		
employ_i	0.1793	Aggregate employment: wage bill weights	contGDPinc	
f1lab_io	1.0000	Overall wage shifter	Land	0.0000
f2tot	0.0000	Ratio, investment/consumption	Labour	0.0745
f3tot	-0.3960	Ratio, consumption/ GDP	Capital	0.0000
f5tot	2.0000	Overall shift term for government demands	IndTax	-0.0059
f5tot2	2.0000	Ratio between f5tot and x3tot	TechChange	0.0000
invslack	-1.0516	Investment slack variable for exogenizing aggregate inve		
p0cif_c	0.0000	Imports price index, C.I.F., local currency		
p0gdpexp	1.2118	GDP price index, expenditure side		
p0gne	1.1425	GNE price index		
p0imp_c	0.0000	Duty-paid imports price index, local currency		
p0realdev	-1.1972	Real devaluation		
p0toft	0.5781	Terms of trade		
p1cap_i	0.9999	Average capital rental		
p1lab_io	1.8889	Average nominal wage		
p1lnd_i	-1.0454	Average land rental		
p1prim_i	1.3972	Index of factor cost		
p2tot_i	1.1231	Aggregate investment price index		
p3tot	0.8801	Consumer price index		
p4_ntrad	0.0000	Price, collective export aggregate		
p4tot	0.5781	Exports price index, local currency		
p5tot	1.9324	Government price index		
p6tot	0.6341	Inventories price index		
phi	0.0000	Exchange rate, local currency/\$world		
q	0.0000	Number of households		
realwage	1.0000	Average real wage		
utility	0.0000	Utility per household		
w0cif_c	0.3247	C.I.F. local currency value of imports		
w0gdpexp	1.2812	Nominal GDP from expenditure side		
w0gdpinc	1.2812	Nominal GDP from income side		
w0gne	1.5565	Nominal GNE		
w0imp_c	0.3181	Value of imports plus duty		
w0tax_csi	0.2409	Aggregate revenue from all indirect taxes		
w1cap_i	0.9999	Aggregate payments to capital		
w1lab_io	2.0716	Aggregate payments to labour		
w1lnd_i	-1.0454	Aggregate payments to land		
w1oct_i	0.0000	Aggregate "other cost" ticket payments		
w1prim_i	1.4877	Aggregate primary factor payments		
w2tot_i	1.1231	Aggregate nominal investment		
w3lux	0.8992	Total nominal supernumerary household expenditure		
w3tot	0.8801	Nominal total household consumption		
w4tot	-2.2795	Local currency border value of exports		
w5tot	3.9710	Aggregate nominal value of government demands		
w6tot	0.6341	Aggregate nominal value of inventories		
x0cif_c	0.3247	Import volume index, C.I.F. weights		
x0gdpexp	0.0686	Real GDP from expenditure side		

x0gdpinc	0.0686	Decomposition of real GDP from income side
x0gne	0.4093	Real GNE
x0imp_c	0.3181	Import volume index, duty-paid weights
x1cap_i	0.0000	Aggregate capital stock, rental weights
x1lnd_i	0.0000	Aggregate land stock, rental weights
x1prim_i	0.0892	Aggregate effective primary factor use
x2tot_i	0.0000	Aggregate real investment expenditure
x3tot	0.0000	Real household consumption
x4_ntrad	0.0000	Quantity, collective export aggregate
x4tot	-2.8412	Export volume index
x5tot	2.0000	Aggregate real government demands
x6tot	0.0000	Aggregate real inventories
x0gdpfac	0.0892	Real GDP at factor cost (inputs) = x1prim_i

## 9 IND variables

	employ	gret	p1cap	p1mat	p1prim	p1tot	p2tot	x1tot	x2tot
Agricultura	-0.8537	-2.3920	-1.2957	0.7030	-0.6178	-0.0831	1.1231	-0.1846	-1.2413
Pecuaria	-0.8943	-2.5399	-1.4453	0.6848	-0.3970	0.1048	1.1231	-0.2853	-1.3401
PrFloPesSil	-0.8059	-2.2175	-1.1193	0.4127	-0.7198	-0.4194	1.1231	-0.1088	-1.1248
ExtMinNMet	-1.3849	-1.4486	-0.3417	0.8134	0.6084	0.7232	1.1231	-0.5960	-0.6123
ExtPetrGas	-2.5692	-1.5572	-0.4516	0.7556	-0.0015	0.3481	1.1231	-0.5040	-0.6846
ExtMinFerro	-1.7617	-2.0456	-0.9454	0.8321	-0.6588	-0.1272	1.1231	-0.1819	-1.0101
ExtMMetNF	-2.7997	-3.6834	-2.6016	0.7692	-0.5876	0.3071	1.1231	-1.2811	-2.1056
AbateCarne	-0.6940	-0.1993	0.9216	0.5329	1.5585	0.6823	1.1231	-0.4582	0.2174
FabRefAcu	-2.1867	-2.2486	-1.1508	0.3004	0.9077	0.4259	1.1231	-1.4933	-1.1456
OutAliment	-0.5718	-0.0310	1.0918	0.6101	1.5787	0.7769	1.1231	-0.3502	0.3289
Bebidas	-1.0959	-0.7522	0.3625	0.9458	0.8418	0.9127	1.1231	-0.3472	-0.1494
Fumo	-1.8296	-1.7595	-0.6561	0.4166	0.1702	0.3516	1.1231	-0.6028	-0.8194
TexVestCalc	-1.0040	-1.4772	-0.3707	0.8076	1.1189	0.9205	1.1231	-0.6655	-0.6314
MadPapel	-2.2704	-1.0917	0.0192	0.7397	1.0293	0.8275	1.1231	-1.2382	-0.3749
ImpRGrava	-0.2541	0.5127	1.6416	0.9882	1.7803	1.3400	1.1231	-0.1427	0.6887
RefPetCoq	-0.4653	0.0479	1.1716	0.3809	1.3568	0.4488	1.1231	-0.1207	0.3812
FabBiocom	-1.2002	-1.1554	-0.0453	0.3462	0.9241	0.4704	1.1231	-0.6062	-0.4173
Quimicos	-1.2205	-1.1876	-0.0778	0.7007	0.8247	0.7306	1.1231	-0.5649	-0.4387
FabBorPlast	-1.4558	-0.6535	0.4623	0.7559	1.3763	0.9344	1.1231	-0.9375	-0.0838
FabMinNMet	-0.8307	-0.5680	0.5488	0.8773	1.2808	1.0158	1.1231	-0.4559	-0.0271
Metalurgia	-2.0937	-2.5705	-1.4763	0.6611	0.4450	0.6218	1.1231	-1.2093	-1.3606
FabProdMet	-0.8718	-0.6334	0.4827	0.7637	1.3102	0.9724	1.1231	-0.5154	-0.0705
FabMaqEq	-1.2026	-0.1353	0.9863	0.7324	1.5738	0.9536	1.1231	-0.7856	0.2598
TransEq	-1.3042	-1.4330	-0.3260	0.7262	0.8316	0.7536	1.1231	-0.6873	-0.6020
FabOutr	-0.9786	-1.1384	-0.0280	0.8059	0.7902	0.7991	1.1231	-0.4212	-0.4059
EnerEleGasN	-0.8109	-0.5787	0.5380	0.7552	0.7790	0.7658	1.1231	-0.1460	0.0000
AguaEsgResid	0.1498	1.0048	2.1392	0.9959	2.0536	1.5830	1.1231	0.0512	0.0000
Construo	-0.0169	0.7303	1.8617	0.9884	1.8726	1.3948	1.1231	-0.0067	0.0000
Comerc	-0.3858	0.3255	1.4523	0.9663	1.6545	1.4070	1.1231	-0.1790	0.5649
TranspCorr	-1.3892	-0.1500	0.9714	0.8176	1.4594	1.1026	1.1231	-0.7429	0.2501
AlojAlim	-0.4665	0.0122	1.1355	0.8226	1.4671	1.1424	1.1231	-0.2060	0.0000
Telecomun	-0.7272	-0.0476	1.0750	1.1310	1.2935	1.2001	1.1231	-0.1963	0.3179
ServicProf	-0.7082	-0.3585	0.7606	1.1045	1.2964	1.2246	1.1231	-0.3379	0.0000
AtivImobili	-0.6396	-0.2637	0.8565	1.1149	0.8711	0.8890	1.1231	-0.0091	0.0000
AdmPublica	2.2491	4.6961	5.8720	1.1151	2.3616	1.9986	1.1231	1.9750	0.0000
Educacao	1.4069	3.1675	4.3262	1.0691	2.0307	1.7974	1.1231	1.3236	0.0000
Saude	1.4596	3.2047	4.3638	1.1056	2.4253	1.8879	1.1231	1.1385	0.0000
OutServPess	0.3591	1.3322	2.4703	0.9608	2.0388	1.6170	1.1231	0.2662	1.2298

## 9 COM variables

	p0dom	p3_s	p4	x0com	x0dom	x0imp	x0loc	x3_s	x4
Agricultura	-0.1144	0.2662	-0.0669	-0.2015	-0.3464	-0.3041	-0.3445	0.2340	0.3352
Pecuaria	0.0652	0.2855	0.0652	-0.2908	-0.2900	-0.0322	-0.2897	0.2269	-0.3253
PrFloPesSil	-0.4566	-0.1253	-0.4566	-0.1601	-0.2325	-0.9086	-0.2888	0.3802	2.3147
ExtMinNMet	0.7088	0.0000	0.7156	-0.5891	-0.3963	-0.9733	-0.5948	0.3333	-3.5025
ExtPetrGas	0.2864	0.0000	0.2864	-0.5368	-0.2256	0.0647	-0.1602	0.3333	-1.4196
ExtMinFerro	-0.1331	0.0000	-0.0042	-0.1848	-1.1590	-1.0124	-1.1586	0.3333	0.0209
ExtMMetNF	0.2995	0.0000	0.2995	-1.2714	-1.1646	-1.0456	-1.1350	0.3333	-1.4842
AbateCarne	0.6769	0.0258	0.6909	-0.4669	0.1825	1.2402	0.2079	0.3237	-3.3842
FabRefAcu	0.3836	0.0460	0.4111	-1.3968	-0.2635	0.5270	-0.2629	0.3161	-2.0305
OutAliment	0.7572	0.1737	0.7697	-0.3954	0.0588	0.8928	0.0893	0.2684	-3.7613
Bebidas	0.9100	0.9725	0.9100	-0.3475	-0.2233	0.9090	-0.1336	-0.0269	-4.4285
Fumo	0.3414	0.3535	0.3414	-0.6027	-0.0049	0.5606	0.1585	0.2016	-1.6899
TexVestCalc	0.9197	1.0159	0.9240	-0.6608	-0.3452	0.7708	-0.2316	-0.0428	-4.4946
MadPapel	0.8219	0.9307	0.8229	-1.2295	-0.5072	0.2690	-0.4582	-0.0116	-4.0151
ImpRGrava	1.3592	1.2958	1.3592	-0.1375	-0.0350	1.1864	0.0153	-0.1451	-6.5273
RefPetCoq	0.3921	-0.2289	0.4372	-0.1489	0.1550	-0.5125	0.0587	0.4191	-2.1575
FabBiocom	0.4718	-0.0696	0.4799	-0.2830	-0.2402	-0.1297	-0.2310	0.3594	-2.3653
Quimicos	0.7109	0.8022	0.7133	-0.5794	-0.2559	-0.2329	-0.2496	0.0357	-3.4913
BorrPlast	0.9392	0.9404	0.9393	-0.9173	-0.6413	0.7141	-0.4804	-0.0151	-4.5669
FabMinNMet	1.0255	0.9282	1.0269	-0.4549	-0.1763	0.7192	-0.1259	-0.0106	-4.9799
Metalurgia	0.5856	0.9014	0.5873	-1.2170	-0.6874	-0.3933	-0.6362	-0.0008	-2.8856
FabProdMet	0.9887	1.0369	0.9893	-0.5638	-0.3627	0.0600	-0.3267	-0.0505	-4.8032
FabMaqEq	0.9519	0.9494	0.9527	-0.7764	-0.2925	-0.0518	-0.2122	-0.0184	-4.6305
AutoCamUti	0.9422	0.8953	0.9422	-0.5944	-0.1899	0.6918	-0.0449	0.0014	-4.5805
CamOnibus	0.8648	0.9701	0.8671	-0.6340	-0.1331	0.8127	-0.0865	-0.0260	-4.2251
PecasAutom	0.4637	0.0000	0.4642	-0.8352	-0.5645	-0.4154	-0.5366	0.3333	-2.2888
AeroEmbOut	0.4751	0.6482	0.4751	-0.8255	-0.1733	-0.2025	-0.1827	0.0925	-2.3419
FabOutr	0.7927	0.9673	0.7985	-0.4634	-0.3072	0.6493	-0.1966	-0.0250	-3.8988
EnerEleGasN	0.7650	0.7701	0.7650	-0.1492	-0.1353	0.7485	-0.1205	0.0475	-3.7388
AguaEsgResid	1.5873	1.5873	0.0000	0.1081	0.1081	0.0000	0.1081	-0.2510	0.0000
Construo	1.3972	0.0000	1.3972	-0.0018	0.0298	2.2156	0.0339	0.3333	-6.7025
Comerc	1.4506	1.4506	1.4506	-0.1371	-0.1150	2.8868	-0.1075	-0.4029	-6.9478
TranspCorr	1.1011	1.0678	1.1011	-0.7132	-0.4739	3.8594	-0.3300	-0.1883	-5.3280
AlojAlim	1.1409	1.0828	1.1409	-0.2032	-0.0168	1.1259	0.0939	-0.0673	-5.5145
Telecomun	1.2000	1.1962	1.2000	-0.1963	-0.1669	1.2334	-0.1478	-0.1088	-5.7899
ServicProf	1.2295	1.2268	1.2295	-0.2790	-0.0810	1.2106	0.0017	-0.1199	-5.9271
AtivImobili	0.8484	0.8484	0.8484	-0.1676	-0.0504	0.8208	-0.0274	0.0187	-4.1362
AlugImp	0.9040	0.9040	0.0000	-0.0017	-0.0017	0.0000	-0.0017	-0.0017	0.0000
AdmPublica	2.0486	0.0000	0.0000	2.0000	2.0000	0.0000	2.0000	0.3333	0.0000
Educacao	1.8319	1.8238	1.8319	1.3452	1.3472	1.9152	1.3479	-0.3366	-8.6768
Saude	1.8955	1.8952	1.8955	1.1433	1.1449	1.9907	1.1450	-0.3623	-8.9616
OutServPess	1.6211	1.5920	1.6211	0.2615	0.3107	1.7201	0.3263	-0.2528	-7.7258



fandecomp	LocalMarket	DomShare	Export	Total
Agricultura	-0.2713	-0.0015	0.0713	-0.2015
Pecuaria	-0.2833	-0.0004	-0.0071	-0.2908
PrFloPesSil	-0.2807	0.0548	0.0657	-0.1601
ExtMinNMet	-0.5584	0.1867	-0.2174	-0.5891
ExtPetrGas	-0.1184	-0.0484	-0.3700	-0.5368
ExtMinFerro	-0.2020	-0.0001	0.0173	-0.1848
ExtMMetNF	-0.7556	-0.0198	-0.4960	-1.2714
AbateCarne	0.1700	-0.0208	-0.6161	-0.4669
FabRefAcu	-0.0943	-0.0002	-1.3023	-1.3968
OutAliment	0.0787	-0.0269	-0.4472	-0.3954
Bebidas	-0.1296	-0.0871	-0.1308	-0.3475
Fumo	0.1022	-0.1054	-0.5995	-0.6027
TexVestCalc	-0.2138	-0.1052	-0.3419	-0.6608
MadPapel	-0.3637	-0.0390	-0.8268	-1.2295
ImpRGrava	0.0151	-0.0495	-0.1031	-0.1375
RefPetCoq	0.0510	0.0836	-0.2835	-0.1489
FabBiocom	-0.2264	-0.0089	-0.0477	-0.2830
Quimicos	-0.2247	-0.0056	-0.3491	-0.5794
BorrPlast	-0.4462	-0.1500	-0.3211	-0.9173
FabMinNMet	-0.1186	-0.0475	-0.2888	-0.4549
Metalurgia	-0.4828	-0.0389	-0.6952	-1.2170
FabProdMet	-0.3118	-0.0345	-0.2175	-0.5638
FabMaqEq	-0.1884	-0.0714	-0.5166	-0.7764
AutoCamUti	-0.0407	-0.1317	-0.4220	-0.5944
CamOnibus	-0.0759	-0.0410	-0.5171	-0.6340
PecasAutom	-0.4523	-0.0236	-0.3593	-0.8352
AeroEmbOut	-0.1278	0.0066	-0.7043	-0.8255
FabOutr	-0.1880	-0.1059	-0.1696	-0.4634
EnerEleGasN	-0.1200	-0.0147	-0.0144	-0.1492
AguaEsgResid	0.1081	0.0000	0.0000	0.1081
Construo	0.0337	-0.0040	-0.0315	-0.0018
Comerc	-0.1072	-0.0075	-0.0225	-0.1371
TranspCorr	-0.3135	-0.1370	-0.2627	-0.7132
AlojAlim	0.0906	-0.1069	-0.1869	-0.2032
Telecomun	-0.1470	-0.0191	-0.0303	-0.1963
ServicProf	0.0017	-0.0800	-0.2007	-0.2790
AtivImobili	-0.0266	-0.0223	-0.1187	-0.1676
AlugImp	-0.0017	0.0000	0.0000	-0.0017
AdmPublica	2.0000	0.0000	0.0000	2.0000
Educacao	1.3477	-0.0007	-0.0018	1.3452
Saude	1.1448	-0.0001	-0.0015	1.1433
OutServPess	0.3243	-0.0155	-0.0472	0.2615

SalesDecom	Interm	Invest	HouseH	Export	GovGE	Stocks	Margins
Agricultura	-0.3311	0.0000	0.0566	0.0713	0.0018	0.0000	0.0000
Pecuaria	-0.3129	-0.0002	0.0294	-0.0071	0.0001	0.0000	0.0000
PrFloPesSil	-0.3717	0.0000	0.1456	0.0657	0.0002	0.0000	0.0000
ExtMinNMet	-0.3717	0.0000	0.0000	-0.2174	0.0000	0.0000	0.0000
ExtPetrGas	-0.1668	0.0000	0.0000	-0.3700	0.0000	0.0000	0.0000
ExtMinFerro	-0.2021	0.0000	0.0000	0.0173	0.0000	0.0000	0.0000
ExtMMetNF	-0.7754	0.0000	0.0000	-0.4960	0.0000	0.0000	0.0000
AbateCarne	-0.0298	0.0000	0.1785	-0.6161	0.0005	0.0000	0.0000
FabRefAcu	-0.1312	0.0000	0.0367	-1.3023	0.0001	0.0000	0.0000
OutAliment	-0.0787	0.0000	0.1301	-0.4472	0.0003	0.0000	0.0000
Bebidas	-0.1670	0.0000	-0.0497	-0.1308	0.0000	0.0000	0.0000
Fumo	-0.0615	0.0000	0.0583	-0.5995	0.0000	0.0000	0.0000
TexVestCalc	-0.2292	0.0000	-0.0899	-0.3419	0.0001	0.0000	0.0000
MadPapel	-0.4004	0.0000	-0.0024	-0.8268	0.0000	0.0000	0.0000
ImpRGrava	0.0450	0.0000	-0.0795	-0.1031	0.0000	0.0000	0.0000
RefPetCoq	-0.0986	0.0000	0.2333	-0.2835	0.0000	0.0000	0.0000
FabBiocom	-0.2817	0.0000	0.0464	-0.0477	0.0000	0.0000	0.0000
Quimicos	-0.2696	0.0000	0.0035	-0.3491	0.0357	0.0000	0.0000
BorrPlast	-0.5807	0.0000	-0.0155	-0.3211	0.0000	0.0000	0.0000
FabMinNMet	-0.1628	0.0000	-0.0032	-0.2888	0.0000	0.0000	0.0000
Metalurgia	-0.5218	0.0000	0.0000	-0.6952	0.0000	0.0000	0.0000
FabProdMet	-0.3342	-0.0051	-0.0070	-0.2175	0.0000	0.0000	0.0000
FabMaqEq	-0.1892	-0.0564	-0.0142	-0.5166	0.0000	0.0000	0.0000
AutoCamUti	-0.0129	-0.0459	-0.1136	-0.4220	0.0000	0.0000	0.0000
CamOnibus	-0.0814	-0.0343	-0.0011	-0.5171	0.0000	0.0000	0.0000
PecasAutom	-0.4759	0.0000	0.0000	-0.3593	0.0000	0.0000	0.0000
AeroEmbOut	-0.1243	-0.0184	0.0214	-0.7043	0.0000	0.0000	0.0000
FabOutr	-0.2453	-0.0115	-0.0371	-0.1696	0.0000	0.0000	0.0000
EnerEleGasN	-0.1487	0.0000	0.0140	-0.0144	0.0000	0.0000	0.0000
AguaEsgResid	0.2108	0.0000	-0.1027	0.0000	0.0000	0.0000	0.0000
Construo	0.0297	0.0000	0.0000	-0.0315	0.0000	0.0000	0.0000
Comerc	-0.0344	0.0000	-0.0197	-0.0225	0.0000	0.0000	-0.0605
TranspCorr	-0.3163	0.0000	-0.0772	-0.2627	0.0000	0.0000	-0.0570
AlojAlim	0.0874	0.0000	-0.1036	-0.1869	0.0000	0.0000	0.0000
Telecomun	-0.1199	0.0000	-0.0462	-0.0303	0.0000	0.0000	0.0000
ServicProf	-0.0885	-0.0041	-0.0253	-0.2007	0.0396	0.0000	0.0000
AtivImobili	-0.0569	0.0000	0.0079	-0.1187	0.0000	0.0000	0.0000
AlugImp	0.0000	0.0000	-0.0017	0.0000	0.0000	0.0000	0.0000
AdmPublica	0.0000	0.0000	0.0000	0.0000	2.0000	0.0000	0.0000
Educacao	0.0001	0.0000	-0.0857	-0.0018	1.4326	0.0000	0.0000
Saude	0.0628	0.0000	-0.1240	-0.0015	1.2059	0.0000	0.0000
OutServPess	0.0003	0.0000	-0.1795	-0.0472	0.4880	0.0000	0.0000

! Command file for ORANIG model, short-run closure

check-on-read elements = warn; ! very often needed  
 cpu=yes ; ! (Optional) Reports CPU times for various stages  
 log file = yes; ! Optional  
 auxiliary files = oranig; ! needed by GEMSIM

! Solution method  
 method = GRAGG ;  
 steps = 2 4 6 ;  
 !method = johansen; ! alternative to above

! Data and summary file  
 !file basedata = basedata.har ;  
 file basedata = aggnat.har ;  
 updated file basedata =<cmf>.upd;  
 file summary = summary.har;

! Automatic closure generated by TABmate Tools...Closure command

! Please do not edit -- instead, add swap statements underneath.

!	Variable	Size	
Exogenous	a0com ; !	COM	Commodity CET technology shifter (negative=good)
Exogenous	a1cap ; !	IND	Capital-augmenting technical change
Exogenous	a1lab_o ; !	IND	Labor-augmenting technical change
Exogenous	a1ld ; !	IND	Land-augmenting technical change
Exogenous	a1prim ; !	IND	All factor augmenting technical change
Exogenous	a1tot ; !	IND	All input augmenting technical change
Exogenous	a2tot ; !	IND	Neutral technical change - investment
Exogenous	a3_s ; !	COM	Taste change, household imp/dom composite
Exogenous	capslack ; !	1	Slack variable to allow fixing aggregate capital
Exogenous	delPTXRATE ; !	IND*DTAX	Change in rate of production tax
Exogenous	f0tax_s ; !	COM*TAXS	General sales tax shifter
Exogenous	f1lab_io ; !	1	Overall wage shifter
Exogenous	f1oct ; !	IND	Shift in price of "other cost" tickets
Exogenous	f1tax_csi ; !	1	Uniform % change in powers of taxes on intermediate usage
Exogenous	f2tax_csi ; !	1	Uniform % change in powers of taxes on investment
Exogenous	f3tax_cs ; !	1	Uniform % change in powers of taxes on household usage
Exogenous	f3tax_s ; !	COM*TAXS	household sales tax shifter
Exogenous	f4p ; !	COM	Price (upward) shift in export demand schedule
Exogenous	f4p_ntrad ; !	1	Uniform upward (price) demand shift for collective exports
Exogenous	f4q ; !	COM	Quantity (right) shift in export demands
Exogenous	f4q_ntrad ; !	1	Uniform right (quantity) demand shift for collective exports
Exogenous	f4tax_ntrad ; !	1	Uniform % change in powers of taxes on nontradtnl exports
Exogenous	f4tax_trad ; !	TRADEXP*TAXS	% change in powers of taxes on tradtnl exports
Exogenous	f5 ; !	COM*SRC	Government demand shift
Exogenous	f5tax_cs ; !	1	Uniform % change in powers of taxes on government usage
Exogenous	f5tot2 ; !	1	Ratio between f5tot and x3tot
Exogenous	fx6 ; !	COM*SRC	Shifter on rule for stocks
Exogenous	invslack ; !	1	Investment slack variable for exogenizing aggregate investment
Exogenous	pf0cif ; !	COM	C.I.F. foreign currency import prices
Exogenous	phi ; !	1	Exchange rate, local currency/\$world
Exogenous	q ; !	1	Number of households
Exogenous	t0imp ; !	COM	Power of tariff
Exogenous	w3lux ; !	1	Total nominal supernumerary household expenditure
Exogenous	x1cap ; !	IND	Current capital stock

Exogenous x1Ind ; ! IND Use of land  
Exogenous x2tot ; ! IND Investment by using industry  
Rest endogenous; ! end of TABmate automatic closure

swap f1lab\_io = realwage;  
! swaps for exogenous settings of real GDP from the expenditure side  
swap invslack = x2tot\_i;  
swap w3lux = x3tot;  
swap f5tot2 = x5tot;  
swap fx6 = delx6;

! Distribution of investment between industries  
xSet EXOGINV # 'exogenous' investment industries #  
(EnerEleGasN, AguaEsgResid, Construo, ServicProf, AlojAlim,  
AtivImobili, AdmPublica, Educacao, Saude);  
xSubset EXOGINV is subset of IND;  
xSet ENDOGINV # 'endogenous' investment industries # = IND - EXOGINV;  
swap x2tot(ENDOGINV) = finv1(ENDOGINV);  
swap x2tot(EXOGINV) = finv2(EXOGINV);

! Introduce subset to define commodities whose sales taxes are cut  
xSet TAXCUTS # commodities whose sales taxes are cut #  
(AbateCarne, FabRefAcu, OutAliment, RefPetCoq, FabBiocom);  
xSubset TAXCUTS is subset of COM;

verbal description =  
Group 3: government economic program: DPSV shortrun closure;

shock x5tot = 2;  
shock realwage = 1;  
shock f3tax\_s(TAXCUTS,TAXS) = uniform -1;

subtotal x5tot = govspend;  
subtotal realwage = minwage;  
subtotal f3tax\_s = taxcut;

contBOT	-0.0592	Contribution of BOT to real expenditure-side GDP (change)	contGDPexp	
delB	0.0000	(Nominal balance of trade)/{nominal GDP} (change)	Consumption	0.1769
delV0tar_c	-1966.5229	Aggregate tariff revenue (change)	Investment	0.0913
delV0tax_csi	1264.8429	Aggregate revenue from all indirect taxes (change)	Government	0.0000
delV1tax_csi	1388.4600	Aggregate revenue from indirect taxes on intermediate (change)	Stocks	0.0000
delV2tax_csi	182.9338	Aggregate revenue from indirect taxes on investment (change)	Exports	0.0288
delV3tax_cs	1500.5406	Aggregate revenue from indirect taxes on households (change)	Imports	-0.0880
delV4tax_c	-0.6867	Aggregate revenue from indirect taxes on export (change)		
delV5tax_cs	4.8664	Aggregate revenue from indirect taxes on government (change)		
employ_i	0.0000	Aggregate employment: wage bill weights	contGDPinc	
f1lab_io	0.3112	Overall wage shifter	Land	0.0000
f2tot	0.1435	Ratio, investment/consumption	Labour	0.0000
f3tot	0.0249	Ratio, consumption/ GDP	Capital	0.1522
f5tot	0.0000	Overall shift term for government demands	IndTax	0.0568
f5tot2	-0.3025	Ratio between f5tot and x3tot	TechChange	0.0000
invslack	0.0000	Investment slack variable for exogenizing aggregate inve		
p0cif_c	0.0000	Imports price index, C.I.F., local currency		
p0gdpexp	0.3466	GDP price index, expenditure side		
p0gne	0.2885	GNE price index		
p0imp_c	-0.4665	Duty-paid imports price index, local currency		
p0realdev	-0.3454	Real devaluation		
p0toft	0.5227	Terms of trade		
p1cap_i	0.1525	Average capital rental		
p1lab_io	0.5891	Average nominal wage		
p1lnd_i	3.6561	Average land rental		
p1prim_i	0.4447	Index of factor cost		
p2tot_i	0.1525	Aggregate investment price index		
p3tot	0.2770	Consumer price index		
p4_ntrad	0.0000	Price, collective export aggregate		
p4tot	0.5227	Exports price index, local currency		
p5tot	0.4662	Government price index		
p6tot	0.1439	Inventories price index		
phi	0.0000	Exchange rate, local currency/\$world		
q	0.0000	Number of households		
realwage	0.3112	Average real wage		
utility	0.7525	Utility per household		
w0cif_c	0.7800	C.I.F. local currency value of imports		
w0gdpexp	0.5563	Nominal GDP from expenditure side		
w0gdpinc	0.5563	Nominal GDP from income side		
w0gne	0.5563	Nominal GNE		
w0imp_c	0.3195	Value of imports plus duty		
w0tax_csi	0.1955	Aggregate revenue from all indirect taxes		
w1cap_i	0.5319	Aggregate payments to capital		
w1lab_io	0.5891	Aggregate payments to labour		
w1lnd_i	3.6561	Aggregate payments to land		
w1oct_i	0.0000	Aggregate "other cost" ticket payments		
w1prim_i	0.6279	Aggregate primary factor payments		
w2tot_i	0.6005	Aggregate nominal investment		
w3lux	1.0363	Total nominal supernumerary household expenditure		
w3tot	0.5813	Nominal total household consumption		
w4tot	0.7903	Local currency border value of exports		
w5tot	0.4662	Aggregate nominal value of government demands		
w6tot	0.1439	Aggregate nominal value of inventories		
x0cif_c	0.7800	Import volume index, C.I.F. weights		
x0gdpexp	0.2090	Real GDP from expenditure side		

x0gdpinc	0.2090	Decomposition of real GDP from income side
x0gne	0.2670	Real GNE
x0imp_c	0.7897	Import volume index, duty-paid weights
x1cap_i	0.3789	Aggregate capital stock, rental weights
x1lnd_i	0.0000	Aggregate land stock, rental weights
x1prim_i	0.1823	Aggregate effective primary factor use
x2tot_i	0.4474	Aggregate real investment expenditure
x3tot	0.3034	Real household consumption
x4_ntrad	0.0000	Quantity, collective export aggregate
x4tot	0.2662	Export volume index
x5tot	0.0000	Aggregate real government demands
x6tot	0.0000	Aggregate real inventories
x0gdpfac	0.1823	Real GDP at factor cost (inputs) = x1prim_i

## 9 IND variables

	employ	gret	p1cap	p1mat	p1prim	p1tot	p2tot	x1tot	x2tot
Agricultura	2.1029	0.0000	0.1525	0.4087	2.4553	1.6268	0.1525	1.5974	2.2229
Pecuaria	0.2766	0.0000	0.1525	0.5153	0.6254	0.5743	0.1525	0.2669	0.3945
PrFloPesSil	0.5025	0.0000	0.1525	0.4812	0.8799	0.7741	0.1525	0.4242	0.6206
ExtMinNMet	-0.0458	0.0000	0.1525	0.2718	0.4084	0.3319	0.1525	0.0675	0.2285
ExtPetrGas	-0.0820	0.0000	0.1525	0.2536	0.3346	0.2972	0.1525	0.2019	0.4060
ExtMinFerro	-0.8006	0.0000	0.1525	0.3081	-0.0547	0.0747	0.1525	-0.3986	-0.5284
ExtMMetNF	-0.8219	0.0000	0.1525	0.3020	0.1898	0.2637	0.1525	-0.5730	-0.5497
AbateCarne	-0.4270	0.0000	0.1525	0.4630	0.4401	0.4597	0.1525	-0.3192	-0.1103
FabRefAcu	-3.8346	0.0000	0.1525	1.2005	0.4491	1.0452	0.1525	-3.7368	-3.5287
OutAliment	-0.7679	0.0000	0.1525	0.7932	0.4193	0.7288	0.1525	-0.6455	-0.4523
Bebidas	-0.1145	0.0000	0.1525	0.4136	0.2899	0.3742	0.1525	0.1029	0.2032
Fumo	-1.9305	0.0000	0.1525	1.0170	0.2950	0.8265	0.1525	-1.7207	-1.6186
TexVestCalc	-0.1189	0.0000	0.1525	0.3534	0.4407	0.3850	0.1525	-0.0526	0.0768
MadPapel	-0.6324	0.0000	0.1525	0.3357	0.3893	0.3519	0.1525	-0.3871	-0.0949
ImpRGrava	-0.0711	0.0000	0.1525	0.2735	0.3972	0.3284	0.1525	0.1288	0.3850
RefPetCoq	0.8074	0.0000	0.1525	0.5714	0.2653	0.5501	0.1525	1.0221	1.0972
FabBiocom	-4.1174	0.0000	0.1525	1.1418	0.3718	0.9763	0.1525	-3.9866	-3.8542
Quimicos	0.0590	0.0000	0.1525	0.2231	0.3533	0.2546	0.1525	0.2070	0.3336
FabBorPlast	-0.1642	0.0000	0.1525	0.2654	0.4327	0.3135	0.1525	-0.0025	0.2885
FabMinNMet	0.1008	0.0000	0.1525	0.3026	0.3913	0.3331	0.1525	0.2250	0.3755
Metalurgia	-0.2370	0.0000	0.1525	0.2276	0.4027	0.2595	0.1525	-0.1203	0.0368
FabProdMet	0.0903	0.0000	0.1525	0.2580	0.4097	0.3159	0.1525	0.2029	0.3649
FabMaqEq	-0.1144	0.0000	0.1525	0.2141	0.4370	0.2727	0.1525	0.0914	0.4782
TransEq	0.7541	0.0000	0.1525	-0.2057	0.3812	-0.0533	0.1525	0.8787	1.0163
FabOutr	-0.0918	0.0000	0.1525	0.2643	0.3392	0.2968	0.1525	0.0369	0.1335
EnerEleGasN	0.0348	0.0000	0.1525	0.2523	0.2305	0.2426	0.1525	0.2530	0.4474
AguaEsgResid	-0.0230	0.0000	0.1525	0.2910	0.3017	0.2969	0.1525	0.1516	0.4474
Construo	0.2457	0.0000	0.1525	0.3007	0.3269	0.3128	0.1525	0.4107	0.4474
Comerc	0.0867	0.0000	0.1525	0.2232	0.3546	0.3074	0.1525	0.2971	0.4793
TranspCorr	-0.2535	0.0000	0.1525	0.3522	0.3851	0.3668	0.1525	0.0602	0.4198
AlojAlim	-0.0519	0.0000	0.1525	0.4045	0.3447	0.3748	0.1525	0.1014	0.4474
Telecomun	-0.1114	0.0000	0.1525	0.2817	0.2698	0.2767	0.1525	0.1780	0.2848
ServicProf	-0.0743	0.0000	0.1525	0.2900	0.3600	0.3338	0.1525	0.0712	0.4474
AtivImobili	0.0396	0.0000	0.1525	0.3010	0.1587	0.1691	0.1525	0.3102	0.4474
AdmPublica	-0.0334	0.0000	0.1525	0.3162	0.5367	0.4725	0.1525	-0.0032	0.4474
Educacao	0.0295	0.0000	0.1525	0.3145	0.5635	0.5031	0.1525	0.0446	0.4474
Saude	0.0244	0.0000	0.1525	0.3012	0.4938	0.4154	0.1525	0.0817	0.4474
OutServPess	0.0662	0.0000	0.1525	0.2904	0.4763	0.4036	0.1525	0.1370	0.3409

## 9 COM variables

	p0dom	p3_s	p4	x0com	x0dom	x0imp	x0loc	x3_s	x4
Agricultura	1.6943	1.2848	1.6517	1.6014	-1.2323	2.4378	-1.0717	-0.0910	12.0969
Pecuaria	0.5051	0.4708	0.5051	0.2845	-0.1266	1.0244	-0.1250	0.2086	18.6384
PrFloPesSil	0.7683	0.6656	0.7683	0.4393	-0.0477	1.3534	0.0683	0.1365	17.0973
ExtMinNMet	0.3206	0.0000	0.3204	0.0743	0.1842	-0.0032	0.1197	0.3841	-1.5865
ExtPetrGas	0.2888	0.0000	0.2888	0.1979	0.7724	1.0712	0.8397	0.3841	-1.4317
ExtMinFerro	0.0734	0.0000	0.0910	-0.3992	-0.1412	-0.0486	-0.1409	0.3841	-0.4537
ExtMMetNF	0.2636	0.0000	0.2636	-0.5537	-0.1753	-0.0434	-0.1426	0.3841	-1.3075
AbateCarne	0.4501	0.4078	0.4472	-0.3072	0.1155	0.7729	0.1313	0.2320	-2.2063
FabRefAcu	1.1173	0.8507	1.0959	-3.6959	-0.8201	-0.2682	-0.8196	0.0682	-5.3040
OutAliment	0.7603	0.6201	0.7518	-0.4789	-0.0475	0.8310	-0.0154	0.1533	-3.6758
Bebidas	0.3729	0.3407	0.3729	0.0748	0.1332	0.6196	0.1718	0.2570	-1.8440
Fumo	0.8320	0.6389	0.8320	-1.6924	-0.3918	1.2320	0.0767	0.1464	-4.0581
TexVestCalc	0.3889	0.3321	0.3881	-0.0411	0.1134	0.5997	0.1630	0.2601	-1.9179
MadPapel	0.3581	0.3403	0.3580	-0.3748	-0.0127	0.2982	0.0070	0.2571	-1.7709
ImpRGrava	0.3322	0.3018	0.3322	0.1237	0.1520	0.4926	0.1661	0.2714	-1.6447
RefPetCoq	-0.3717	-0.2486	-0.3435	0.5580	0.3798	0.1006	0.3394	0.4774	1.7354
FabBiocom	0.9688	0.7570	0.9632	0.3610	0.4647	0.8523	0.4966	0.1028	-4.6798
Quimicos	0.2468	0.2184	0.2470	0.1847	0.3415	0.2503	0.3166	0.3025	-1.2258
BorrPlast	0.3140	0.2807	0.3140	0.0132	0.1318	0.7102	0.2007	0.2793	-1.5554
FabMinNMet	0.3363	0.2568	0.3362	0.2268	0.3432	0.6702	0.3616	0.2882	-1.6642
Metalurgia	0.2565	0.2700	0.2566	-0.1133	0.2548	0.3553	0.2723	0.2833	-1.2731
FabProdMet	0.3217	0.3019	0.3216	0.1874	0.2718	0.3860	0.2816	0.2714	-1.5927
FabMaqEq	0.2711	0.2405	0.2712	0.1015	0.2831	0.3380	0.3014	0.2943	-1.3449
AutoCamUti	-1.1470	-1.6519	-1.1470	0.3252	-0.2443	4.8174	0.5741	1.0131	5.9378
CamOnibus	-0.7183	-0.7025	-0.7142	0.5290	0.0938	7.1770	0.4359	0.6491	3.6489
PecasAutom	-0.5041	0.0000	-0.5038	0.6158	0.2542	2.1534	0.6023	0.3841	2.5575
AeroEmbOut	5.3961	4.0839	5.3961	3.5694	-0.4778	1.4835	0.1446	-1.0853	12.9787
FabOutr	0.2758	0.2627	0.2759	0.0444	0.1087	0.4260	0.1454	0.2860	-1.3682
EnerEleGasN	0.2425	0.2428	0.2425	0.2243	0.2298	0.5373	0.2350	0.2934	-1.2036
AguaEsgResid	0.2966	0.2966	0.0000	0.1437	0.1437	0.0000	0.1437	0.2734	0.0000
Construo	0.3135	0.0000	0.3135	0.4082	0.4174	0.6874	0.4180	0.3841	-1.5527
Comerc	0.2900	0.2900	0.2900	0.2692	0.2748	0.5933	0.2756	0.5517	-1.4372
TranspCorr	0.3680	0.3571	0.3680	0.0619	0.1594	1.5343	0.2053	0.7639	-1.8198
AlojAlim	0.3768	0.3577	0.3768	0.1056	0.1747	0.5463	0.2108	0.2506	-1.8628
Telecomun	0.2765	0.2757	0.2765	0.1778	0.1859	0.5085	0.1904	0.2812	-1.3712
ServicProf	0.3364	0.3356	0.3364	0.0729	0.1338	0.4975	0.1572	0.2589	-1.6651
AtivImobili	0.1359	0.1359	0.1359	0.2037	0.2297	0.3188	0.2321	0.3333	-0.6767
AlugImp	0.1813	0.1813	0.0000	0.3163	0.3163	0.0000	0.3163	0.3163	0.0000
AdmPublica	0.4789	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.3841	0.0000
Educacao	0.5133	0.5111	0.5133	0.0494	0.0499	0.8090	0.0509	0.1937	-2.5275
Saude	0.4169	0.4169	0.4169	0.0823	0.0826	0.4482	0.0827	0.2286	-2.0588
OutServPess	0.4047	0.3975	0.4047	0.1445	0.1577	0.7301	0.1641	0.2358	-1.9991

fandecamp	LocalMarket	DomShare	Export	Total
Agricultura	-0.8432	-0.1271	2.5717	1.6014
Pecuaria	-0.1223	-0.0016	0.4084	0.2845
PrFloPesSil	0.0664	-0.1127	0.4856	0.4393
ExtMinNMMet	0.1123	0.0605	-0.0985	0.0743
ExtPetrGas	0.6207	-0.0496	-0.3731	0.1979
ExtMinFerro	-0.0246	0.0000	-0.3746	-0.3992
ExtMMetNF	-0.0949	-0.0218	-0.4369	-0.5537
AbateCarne	0.1074	-0.0129	-0.4017	-0.3072
FabRefAcu	-0.2940	-0.0002	-3.4018	-3.6959
OutAliment	-0.0135	-0.0283	-0.4370	-0.4789
Bebidas	0.1667	-0.0374	-0.0545	0.0748
Fumo	0.0494	-0.3022	-1.4396	-1.6924
TexVestCalc	0.1506	-0.0458	-0.1459	-0.0411
MadPapel	0.0055	-0.0156	-0.3647	-0.3748
ImpRGrava	0.1635	-0.0139	-0.0260	0.1237
RefPetCoq	0.2949	0.0350	0.2280	0.5580
FabBiocom	0.4865	-0.0312	-0.0943	0.3610
Quimicos	0.2850	0.0223	-0.1226	0.1847
BorrPlast	0.1865	-0.0640	-0.1093	0.0132
FabMinNMMet	0.3406	-0.0173	-0.0965	0.2268
Metalurgia	0.2067	-0.0133	-0.3067	-0.1133
FabProdMet	0.2688	-0.0093	-0.0721	0.1874
FabMaqEq	0.2678	-0.0163	-0.1500	0.1015
AutoCamUti	0.5191	-0.7409	0.5470	0.3252
CamOnibus	0.3819	-0.2995	0.4466	0.5290
PecasAutom	0.5068	-0.2925	0.4015	0.6158
AeroEmbOut	0.1008	-0.4349	3.9035	3.5694
FabOutr	0.1391	-0.0351	-0.0595	0.0444
EnerEleGasN	0.2340	-0.0051	-0.0046	0.2243
AguaEsgResid	0.1437	0.0000	0.0000	0.1437
Construo	0.4160	-0.0005	-0.0073	0.4082
Comerc	0.2747	-0.0008	-0.0047	0.2692
TranspCorr	0.1951	-0.0435	-0.0897	0.0619
AlojAlim	0.2036	-0.0349	-0.0631	0.1056
Telecomun	0.1894	-0.0044	-0.0072	0.1778
ServicProf	0.1518	-0.0226	-0.0564	0.0729
AtivImobili	0.2254	-0.0023	-0.0194	0.2037
AlugImp	0.3163	0.0000	0.0000	0.3163
AdmPublica	0.0000	0.0000	0.0000	0.0000
Educacao	0.0508	-0.0010	-0.0005	0.0494
Saude	0.0826	0.0000	-0.0003	0.0823
OutServPess	0.1631	-0.0063	-0.0122	0.1445



SalesDecom	Interm	Invest	HouseH	Export	GovGE	Stocks	Margins
Agricultura	-0.9156	0.0012	-0.0560	2.5717	0.0000	0.0000	0.0000
Pecuaria	-0.2009	0.0500	0.0270	0.4084	0.0000	0.0000	0.0000
PrFloPesSil	-0.1108	0.0327	0.0318	0.4856	0.0000	0.0000	0.0000
ExtMinNMet	0.1728	0.0000	0.0000	-0.0985	0.0000	0.0000	0.0000
ExtPetrGas	0.5363	0.0348	0.0000	-0.3731	0.0000	0.0000	0.0000
ExtMinFerro	-0.0246	0.0000	0.0000	-0.3746	0.0000	0.0000	0.0000
ExtMMetNF	-0.1168	0.0000	0.0000	-0.4369	0.0000	0.0000	0.0000
AbateCarne	-0.0357	0.0000	0.1301	-0.4017	0.0000	0.0000	0.0000
FabRefAcu	-0.3020	0.0000	0.0079	-3.4018	0.0000	0.0000	0.0000
OutAliment	-0.1084	0.0000	0.0666	-0.4370	0.0000	0.0000	0.0000
Bebidas	0.0100	0.0000	0.1193	-0.0545	0.0000	0.0000	0.0000
Fumo	-0.1738	0.0000	-0.0790	-1.4396	0.0000	0.0000	0.0000
TexVestCalc	-0.0259	0.0000	0.1307	-0.1459	0.0000	0.0000	0.0000
MadPapel	-0.0344	0.0004	0.0239	-0.3647	0.0000	0.0000	0.0000
ImpRGrava	0.0707	0.0000	0.0789	-0.0260	0.0000	0.0000	0.0000
RefPetCoq	0.0641	0.0000	0.2658	0.2280	0.0000	0.0000	0.0000
FabBiocom	0.4441	0.0000	0.0113	-0.0943	0.0000	0.0000	0.0000
Quimicos	0.2412	0.0000	0.0661	-0.1226	0.0000	0.0000	0.0000
BorrPlast	0.1041	0.0000	0.0184	-0.1093	0.0000	0.0000	0.0000
FabMinNMet	0.3207	0.0000	0.0026	-0.0965	0.0000	0.0000	0.0000
Metalurgia	0.1927	0.0000	0.0007	-0.3067	0.0000	0.0000	0.0000
FabProdMet	0.2001	0.0348	0.0245	-0.0721	0.0000	0.0000	0.0000
FabMaqEq	0.0353	0.1638	0.0524	-0.1500	0.0000	0.0000	0.0000
AutoCamUti	-0.0226	-0.1054	-0.0938	0.5470	0.0000	0.0000	0.0000
CamOnibus	-0.0407	0.1186	0.0044	0.4466	0.0000	0.0000	0.0000
PecasAutom	0.2143	0.0000	0.0000	0.4015	0.0000	0.0000	0.0000
AeroEmbOut	0.0015	-0.0320	-0.3036	3.9035	0.0000	0.0000	0.0000
FabOutr	-0.0182	0.0534	0.0687	-0.0595	0.0000	0.0000	0.0000
EnerEleGasN	0.1427	0.0000	0.0863	-0.0046	0.0000	0.0000	0.0000
AguaEsgResid	0.0318	0.0000	0.1119	0.0000	0.0000	0.0000	0.0000
Construo	0.0446	0.3709	0.0000	-0.0073	0.0000	0.0000	0.0000
Comerc	-0.0024	0.0000	0.0270	-0.0047	0.0000	0.0000	0.2493
TranspCorr	-0.0119	0.0000	0.1685	-0.0897	0.0000	0.0000	-0.0050
AlojAlim	-0.0009	0.0000	0.1697	-0.0631	0.0000	0.0000	0.0000
Telecomun	0.0709	0.0000	0.1140	-0.0072	0.0000	0.0000	0.0000
ServicProf	0.0430	0.0333	0.0529	-0.0564	0.0000	0.0000	0.0000
AtivImobili	0.0817	0.0000	0.1415	-0.0194	0.0000	0.0000	0.0000
AlugImp	0.0000	0.0000	0.3163	0.0000	0.0000	0.0000	0.0000
AdmPublica	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Educacao	0.0026	0.0000	0.0473	-0.0005	0.0000	0.0000	0.0000
Saude	0.0045	0.0000	0.0781	-0.0003	0.0000	0.0000	0.0000
OutServPess	0.0154	0.0000	0.1414	-0.0122	0.0000	0.0000	0.0000

! Command file for ORANIG model, long-run closure

check-on-read elements = warn; ! very often needed  
 cpu=yes ; ! (Optional) Reports CPU times for various stages  
 log file = yes; ! Optional  
 auxiliary files = oranig; ! needed by GEMSIM

! Solution method

method = GRAGG ;

steps = 2 4 6 ;

!method = johansen; ! alternative to above

! Data and summary file

!file basedata = basedata.har ;

file basedata = aggnat.har ;

updated file basedata =<cmf>.upd;

file summary = summary.har;

! Automatic closure generated by TABmate Tools...Closure command

! Please do not edit -- instead, add swap statements underneath.

! Variable Size

Exogenous	a0com ; ! COM	Commodity CET technology shifter (negative=good)
Exogenous	a1cap ; ! IND	Capital-augmenting technical change
Exogenous	a1lab_o ; ! IND	Labor-augmenting technical change
Exogenous	a1ld ; ! IND	Land-augmenting technical change
Exogenous	a1prim ; ! IND	All factor augmenting technical change
Exogenous	a1tot ; ! IND	All input augmenting technical change
Exogenous	a2tot ; ! IND	Neutral technical change - investment
Exogenous	a3_s ; ! COM	Taste change, household imp/dom composite
Exogenous	capslack ; ! 1	Slack variable to allow fixing aggregate capital
Exogenous	delPTXRATE ; ! IND*DTAX	Change in rate of production tax
Exogenous	f0tax_s ; ! COM*TAXS	General sales tax shifter
Exogenous	f1lab_io ; ! 1	Overall wage shifter
Exogenous	f1oct ; ! IND	Shift in price of "other cost" tickets
Exogenous	f1tax_csi ; ! 1	Uniform % change in powers of taxes on intermediate usage
Exogenous	f2tax_csi ; ! 1	Uniform % change in powers of taxes on investment
Exogenous	f3tax_cs ; ! 1	Uniform % change in powers of taxes on household usage
Exogenous	f3tax_s ; ! COM*TAXS	household sales tax shifter
Exogenous	f4p ; ! COM	Price (upward) shift in export demand schedule
Exogenous	f4p_ntrad ; ! 1	Uniform upward (price) demand shift for collective exports
Exogenous	f4q ; ! COM	Quantity (right) shift in export demands
Exogenous	f4q_ntrad ; ! 1	Uniform right (quantity) demand shift for collective exports
Exogenous	f4tax_ntrad ; ! 1	Uniform % change in powers of taxes on nontradtnl exports
Exogenous	f4tax_trad ; ! TRADEXP*TAXS	% change in powers of taxes on tradtnl exports
Exogenous	f5 ; ! COM*SRC	Government demand shift
Exogenous	f5tax_cs ; ! 1	Uniform % change in powers of taxes on government usage
Exogenous	f5tot2 ; ! 1	Ratio between f5tot and x3tot
Exogenous	fx6 ; ! COM*SRC	Shifter on rule for stocks
Exogenous	invslack ; ! 1	Investment slack variable for exogenizing aggregate investment
Exogenous	pf0cif ; ! COM	C.I.F. foreign currency import prices
Exogenous	phi ; ! 1	Exchange rate, local currency/\$world
Exogenous	q ; ! 1	Number of households
Exogenous	t0imp ; ! COM	Power of tariff
Exogenous	w3lux ; ! 1	Total nominal supernumerary household expenditure
Exogenous	x1cap ; ! IND	Current capital stock

Exogenous x1Ind ; ! IND Use of land  
Exogenous x2tot ; ! IND Investment by using industry  
Rest endogenous; ! end of TABmate automatic closure

```
swap f1lab_io = realwage;  
! swaps for exogenous settings of real GDP from the expenditure side  
swap invslack = x2tot_i;  
swap w3lux = x3tot;  
swap f5tot2 = x5tot;  
swap fx6 = delx6;
```

```
! Distribution of investment between industries  
xSet EXOGINV # 'exogenous' investment industries #  
(EnerEleGasN, AguaEsgResid, Construo, ServicProf, AlojAlim,  
AtivImobili, AdmPublica, Educacao, Saude);  
xSubset EXOGINV is subset of IND;  
xSet ENDOGINV # 'endogenous' investment industries # = IND - EXOGINV;  
swap x2tot(ENDOGINV) = finv1(ENDOGINV);  
swap x2tot(EXOGINV) = finv2(EXOGINV);
```

```
! swaps to switch to long-run closure  
swap realwage = employ_i;  
swap x2tot_i = invslack;  
swap x3tot = delB;  
swap x1cap = gret;  
swap finv1(ENDOGINV) = finv3(ENDOGINV); !*! fixed investment/capital ratios
```

```
! Introduce subset to define agric commodities whose exports are shocked  
xSet EXPSHK # agric commodities whose exports are shocked #  
(Agricultura, Pecuaria, PrFloPesSil);  
xSubset EXPSHK is subset of COM;
```

```
verbal description =  
Group 6: Brazil joins CPTPP: longrun closure;
```

```
shock f4p(EXPSHK) = uniform 4;  
shock f4p("AeroEmbOut") = 8;
```

```
shock t0imp("AutoCamUti") = -6;  
shock t0imp("CamOnibus") = -6;  
shock t0imp("PecasAutom") = -6;
```

```
subtotal f4p = expshk;  
subtotal t0imp = impshk;
```