

USA Add Equation Parameter Matrix Write USA Equations Put USA Equations in Model Calculate 1 Intercept
 Edit Equation Equation Bank Symmetry

USA - Equation Parameter Matrices and Equations

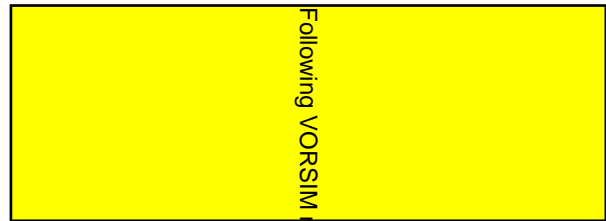
export price (world prices with or without ftm trade premium and with export tax)

export price	non-fta or fta mem.	fta premium	export tax	world p. trans. e.	exchange rate
px	$*((1-!ftm) \uparrow \text{Atf} , !tm))$		$*(1-!tx)$	$WLDpx ^{\wedge}\#$	$/!xrt$
FOODA	-	-	-	1.0	-
BEVTB	-	-	-	1.0	-
CRUDM	-	-	-	1.0	-
FUELS	-	-	-	1.0	-
OILFT	-	-	-	1.0	-
CHEMR	-	-	-	1.0	-
MANUG	-	-	-	1.0	-
MACHT	-	-	-	1.0	-
MISCM	-	-	-	1.0	-
CTNEC	-	-	-	1.0	-



import price (with own, ftm, or cmm tariff)

import price	existing tariff	existing tariff	fta tariff	cmk tariff	world p. trans. e.	exchange rate
pm	$+(!cp -1)/\#$	$n*(1+!tm)$	$\uparrow \text{Atf} , !tm)$	$+CMKtc)$	$WLDpx ^{\wedge}\#$	$/!xrt$
FOODA	-1.00	-	-	-	1.0	-
BEVTB	-1.00	-	-	-	1.0	-
CRUDM	-1.00	-	-	-	1.0	-
FUELS	-1.00	-	-	-	1.0	-
OILFT	-1.00	-	-	-	1.0	-
CHEMR	-1.00	-	-	-	1.0	-
MANUG	-1.00	-	-	-	1.0	-
MACHT	-1.00	-	-	-	1.0	-
MISCM	-1.00	-	-	-	1.0	-
CTNEC	-1.00	-	-	-	1.0	-



exports

export supply	supply shift term	supply elast.
xs	$*!fx $	$*!px ^{\wedge}\#$
FOODA	-	1.00
BEVTB	-	1.00
CRUDM	-	1.00
FUELS	-	1.00
OILFT	-	1.00
CHEMR	-	1.00
MANUG	-	1.00
MACHT	-	1.00
MISCM	-	1.00
CTNEC	-	1.00



imports

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import demand	demand shift term	demand elast.
md	*!fm	*!pm ^#
FOODA	-	-1.00
BEVTB	-	-1.00
CRUDM	-	-1.00
FUELS	-	-1.00
OILFT	-	-1.00
CHEMR	-	-1.00
MANUG	-	-1.00
MACHT	-	-1.00
MISCM	-	-1.00
CTNEC	-	-1.00



net trade = xs - md

net trade	export supply	import demand
nt	+!xs	-!md
FOODA	-	-
BEVTB	-	-
CRUDM	-	-
FUELS	-	-
OILFT	-	-
CHEMR	-	-
MANUG	-	-
MACHT	-	-
MISCM	-	-
CTNEC	-	-

balance of payments

balance payments	net trade at wld p.	capital flow
bop	ntCTNEC))	+!cfl)
bop	-	-

zz	n=1,!tm ,9)
FOODA	-
BEVTB	-
CRUDM	-
FUELS	-
OILFT	-
CHEMR	-
MANUG	-
MACHT	-
MISCM	-
CTNEC	-



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Equations

USApxFOD	$1*((1-USAftm)+USAftm*(1+MIN(FTAtfFOODA,USAtmFOODA)))*(1-USAtxFOODA)*(WLDpxFOODA^1)/USAxrt$
USApxBEV	$1*((1-USAftm)+USAftm*(1+MIN(FTAtfBEVTB,USAtmBEVTB)))*(1-USAtxBEVTB)*(WLDpxBEVTB^1)/USAxrt$
USApxCRU	$1*((1-USAftm)+USAftm*(1+MIN(FTAtfCRUDM,USAtmCRUDM)))*(1-USAtxCRUDM)*(WLDpxCRUDM^1)/USAxrt$
USApxFUE	$1*((1-USAftm)+USAftm*(1+MIN(FTAtfFUELS,USAtmFUELS)))*(1-USAtxFUELS)*(WLDpxFUELS^1)/USAxrt$
USApxOIL	$1*((1-USAftm)+USAftm*(1+MIN(FTAtfOILFT,USAtmOILFT)))*(1-USAtxOILFT)*(WLDpxOILFT^1)/USAxrt$
USApxCHE	$1*((1-USAftm)+USAftm*(1+MIN(FTAtfCHEMR,USAtmCHEMR)))*(1-USAtxCHEMR)*(WLDpxCHEMR^1)/USAxrt$
USApxMAN	$1*((1-USAftm)+USAftm*(1+MIN(FTAtfMANUG,USAtmMANUG)))*(1-USAtxMANUG)*(WLDpxMANUG^1)/USAxrt$
USApxMAC	$1*((1-USAftm)+USAftm*(1+MIN(FTAtfMACHT,USAtmMACHT)))*(1-USAtxMACHT)*(WLDpxMACHT^1)/USAxrt$
USApxMIS	$1*((1-USAftm)+USAftm*(1+MIN(FTAtfMISCM,USAtmMISCM)))*(1-USAtxMISCM)*(WLDpxMISCM^1)/USAxrt$
USApxCCT	$1*((1-USAftm)+USAftm*(1+MIN(FTAtfCTNEC,USAtmCTNEC)))*(1-USAtxCCTNEC)*(WLDpxCTNEC^1)/USAxrt$
USApmFO	$1*(1+(USAcPFOODA-1)/-1)*((1-USAftm-USAcmm)*(1+USAtmFOODA)+USAftm*(1+MIN(FTAtfFOODA,USAtmFOODA))+USAcmm*(1+CMKtcFOODA))*(WLDpxFOODA^1)/USAxrt$
USApmBE	$1*(1+(USAcPBEVTB-1)/-1)*((1-USAftm-USAcmm)*(1+USAtmBEVTB)+USAftm*(1+MIN(FTAtfBEVTB,USAtmBEVTB))+USAcmm*(1+CMKtcBEVTB))*(WLDpxBEVTB^1)/USAxrt$
USApmCR	$1*(1+(USAcPCRUDM-1)/-1)*((1-USAftm-USAcmm)*(1+USAtmCRUDM)+USAftm*(1+MIN(FTAtfCRUDM,USAtmCRUDM))+USAcmm*(1+CMKtcCRUDM))*(WLDpxCRUDM^1)/USAxrt$
USApmFU	$1*(1+(USAcPFUELS-1)/-1)*((1-USAftm-USAcmm)*(1+USAtmFUELS)+USAftm*(1+MIN(FTAtfFUELS,USAtmFUELS))+USAcmm*(1+CMKtcFUELS))*(WLDpxFUELS^1)/USAxrt$
USApmOIL	$1*(1+(USAcPOILFT-1)/-1)*((1-USAftm-USAcmm)*(1+USAtmOILFT)+USAftm*(1+MIN(FTAtfOILFT,USAtmOILFT))+USAcmm*(1+CMKtcOILFT))*(WLDpxOILFT^1)/USAxrt$
USApmCH	$1*(1+(USAcPCHEMR-1)/-1)*((1-USAftm-USAcmm)*(1+USAtmCHEMR)+USAftm*(1+MIN(FTAtfCHEMR,USAtmCHEMR))+USAcmm*(1+CMKtcCHEMR))*(WLDpxCHEMR^1)/USAxrt$
USApmMA	$1*(1+(USAcPMANUG-1)/-1)*((1-USAftm-USAcmm)*(1+USAtmMANUG)+USAftm*(1+MIN(FTAtfMANUG,USAtmMANUG))+USAcmm*(1+CMKtcMANUG))*(WLDpxMANUG^1)/USAxrt$
USApmMACH	$1*(1+(USAcPMACHT-1)/-1)*((1-USAftm-USAcmm)*(1+USAtmMACHT)+USAftm*(1+MIN(FTAtfMACHT,USAtmMACHT))+USAcmm*(1+CMKtcMACHT))*(WLDpxMACHT^1)/USAxrt$
USApmMIS	$1*(1+(USAcPMISCM-1)/-1)*((1-USAftm-USAcmm)*(1+USAtmMISCM)+USAftm*(1+MIN(FTAtfMISCM,USAtmMISCM))+USAcmm*(1+CMKtcMISCM))*(WLDpxMISCM^1)/USAxrt$
USApmCT	$1*(1+(USAcPCTNEC-1)/-1)*((1-USAftm-USAcmm)*(1+USAtmCTNEC)+USAftm*(1+MIN(FTAtfCTNEC,USAtmCTNEC))+USAcmm*(1+CMKtcCTNEC))*(WLDpxCTNEC^1)/USAxrt$
USAxSFO	52690273.2*USAfxFODAA*USApxFODAA^1
USAxSBEV	7269448.3*USAfxBEVTB*USApxBEVTB^1
USAxSCR	43795703.1*USAfxCRUDM*USApxCRUDM^1
USAxSFUE	30582678.5*USAfxFUELS*USApxFUELS^1
USAxSOIL	2003899.6*USAfXOILFT*USApXOILFT^1
USAxSCHE	140499681.6*USAfxCHEMR*USApxCHEMR^1
USAxSMAN	94568687.6*USAfXMANUG*USApXMANUG^1
USAxSMACH	449647865.7*USAfXMACHT*USApXMACHT^1
USAxSMIS	107992550.4*USAfXMISCM*USApXMISCM^1
USAxSCT	35616036.4*USAfXCTNEC*USApXCTNEC^1
USAmDF	53144877.499852*USAfMFOODA*USApMFOODA^1
USAmDBE	18279460.766221*USAfMBEVTB*USApMBEVTB^1
USAmDCR	28925082.867375*USAfMCRUDM*USApMCRUDM^1
USAmDFU	290632743.068052*USAfMFUELS*USApMFUELS^1
USAmDOIL	2445383.872216*USAfMOILFT*USApMOILFT^1
USAmDCH	131421636.210575*USAfMCHEMR*USApMCHEMR^1
USAmDMA	196542339.346334*USAfMANUG*USApMANUG^1
USAmDMA	655608383.807952*USAfMACHT*USApMACHT^1
USAmDMI	274022024.802*USAfMISCM*USApMISCM^1
USAmDCT	59535724.50508*USAfMCTNEC*USApMCTNEC^1
USAntFO	0+USAxSFOODA-USAmDFOODA
USAntBEV	0+USAxSBEVTB-USAmDBEVTB
USAntCRL	0+USAxSCRUDM-USAmDCRUDM
USAntFUE	0+USAxSFUELS-USAmDFUELS
USAntOIL	0+USAxSOILFT-USAmDOILFT
USAntCHE	0+USAxSCHEMR-USAmDCHEMR
USAntMAN	0+USAxSMANUG-USAmDMA

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USAntMAC		0+USAxsmACHT-USAmMACHT		
USAntMIS		0+USAxsmISCM-USAmMISCM		
USAntCTN		0+USAxsmCTNEC-USAmCTNEC		
USAbop		<u>0+(SUMPRODUCT((WLDpxFOODA:WLDpxCTNEC),(USAntFOODA:USAntCTNEC))+USAcfl)</u>		
USAzzFOC		0+IF(USAftm=1,USAtmFOODA,9)		
USAzzBEV		0+IF(USAftm=1,USAtmBEVTB,9)		
USAzzCRL		0+IF(USAftm=1,USAtmCRUDM,9)		
USAzzFUE		0+IF(USAftm=1,USAtmFUELS,9)		
USAzzOIL		0+IF(USAftm=1,USAtmOILFT,9)		
USAzzCHE		0+IF(USAftm=1,USAtmCHEMR,9)		
USAzzMAI		0+IF(USAftm=1,USAtmMANUG,9)		
USAzzMAC		0+IF(USAftm=1,USAtmMACHT,9)		
USAzzMIS		0+IF(USAftm=1,USAtmMISCM,9)		
USAzzCTN		0+IF(USAftm=1,USAtmCTNEC,9)		