

Kazakhstan

David Roland-Holst and Saule Kazybayeva

1. Introduction

This document briefly describes a new social accounting matrix (SAM) for Kazakhstan, constructed to be consistent with 2005 macroeconomic structure and with the sectoring scheme of the GTAP data base. This table was estimated by the author from a combination of official and third-party data resources. As such, it does not represent official information or any governmental or other institutional decisions or actions based on component data.

2. Source Material

The current table was estimated from four primary sources:

1. A detailed 2002 SAM estimated by David Roland-Holst (2005) for the Asian Development Bank from official Kazak data.
2. Official macroeconomic and trade statistics for Kazakhstan for 2005 (a macro SAM).
3. GTAP 6 data for the Russian economy.

Data sources 1 and 2 are documented elsewhere by the authors. Macroeconomic statistics were obtained from Kazak Ministries and corroborated with IMF reporting statistics. GTAP 6 is fully documented at www.gtap.org

3. Sectoral Classification

The original 2002 was estimated by the authors from official statistics on input-output accounts, trade, taxes, and national income statistics. This SAM detailed 61 activities/commodities, 20 household groups, and 12 trading partners. Table 1 details the native aggregation for the 2002 and 2005 SAMs estimated by the authors. This table has since been updated with nonsurvey methods to 2005, then aggregated/disaggregated to make it consistent with GTAP accounting conventions. Detailed concordances for this are provided in the spreadsheet accompanying the data submission. Agriculture was disaggregated using sectoral shares from the Russian GTAP 6 submission. Nonsurvey methods were also used to impute the allocation of imported commodities across demand sources.

References

- Abdiev, K.S. (ed.). 2007. National Accounts of the Republic of Kazakhstan, Agency on Statistics of the Republic of Kazakhstan, Almaty.
- Ganiev, Bahodir, and David Roland-Holst. 2006. "Regionalism and Multilateralism in Central Asia" , with Bahodir Ganiev, in Ganiev, Bahodir (ed.) *Central Asia: Integrating Into The International Trading System Through Regional Cooperation In Trade Policy, Transport, And Customs Transit*, Asian Development Bank.
- Roland-Holst, David. 2005. "Economic Impacts of Reducing Trade Barriers in the Central Asian Republics", Ministry of Trade of Kazakhstan, June 7, Almaty.

Table 1: Native Aggregation for 2002 and 2005 SAMs for Kazakhstan

MicroSAM Institutions					
		Label	Definition		
Activities	1	A01Agric	Products of agriculture and hunting and related services		
	2	A02Forest	Products of forestry and timber production and related services		
	3	A03Fishery	Fish and other fishery products; fishery and fish-breeding related services		
	4	A04Coal	Coal and lignite; peat		
	5	A05OilGas	Crude oil and natural gas; services connected with petroleum and gas extraction, except exploration.		
	6	A06MetalOre	Metal ores		
	7	A07OthrMing	Other mining and quarrying products		
	8	A08ProcFood	Foodstuffs and beverage food		
	9	A09Tobacco	Tobacco goods		
	10	A10Textiles	Textiles		
	11	A11Apparel	Garments; furs		
	12	A12Leather	Leather and leather goods		
	13	A13WdProd	Wood, woodworks and corkwoodwork (except furniture), straw- and other wicker-work		
	14	A14Paper	Cellulose, paper and paper products		
	15	A15Printing	Printed matters and information media		
	16	A16RefPetr	Coke, petroleum derivatives and other fuel		
	17	A17Chemical	Chemical agents, chemical products and chemical fibres		
	18	A18Plastic	Rubber and plastics		
	19	A19OthMinrl	Other non-metal mineral products		
	20	A20Metals	Parent metals		
	21	A21FabMetal	Fabricated metal products, except machines and equipment		
	22	A22Machnry	Machines and equipment not referred to other groups		
	23	A23Technlgy	Office appliances and computer facilities (computers)		
	24	A24ElecEquip	Electrical equipment and installation not referred to other groups		
	25	A25TelcmTV	Radio, television and communication equipment and apparatus		
	26	A26MedTech	Medical equipment and facilities, measuring and optical devices, watch and clocks		
	27	A27Vehicle	Motor cars, trailers and semi-trailers		
	28	A28OthTrnsp	Other transports		
	29	A29OthMfg	Furniture; other manufactured products not referred to other groups		
	30	A30Recyclng	Recycling services		
	31	A31Utility	Power, gas and hot water		
	32	A32Water	Collected and treated water, water distribution services		
	33	A33Construc	Building and construction work		
	34	A34Transprt	Motor cars and motorcycles trade, maintenance and repair; motor fuel retail trade services		
	35	A35WhlTrdSv	Wholesale and commission business services, except automobile and motorcycle business		
	36	A36RefTrdSv	Retail trade services, except automobile and motorcycle business; personal effects and household goods repair services		
	37	A37Hotel	Hotel, camping and other accommodation services		
	38	A38Restmnt	Food and beverage providing services		
	39	A39FoodServ	Canteens and meals delivery services		
	40	A40TrnsLand	Transportation by land services and pipeline transportation		

MicroSAM Institutions					
		Label	Definition		
	41	A41TrnsWat	Water transport services		
	42	A42TrnsAir	Air transport services		
	43	A43PassServ	Passenger traffic services		
	44	A44PTT	Post and electrical communication services		
	45	A45Finance	Financial intermediation, except insurance and provision of pensions, services		
	46	A46Insurnce	Insurance and provision of pensions, except compulsory social maintenance services		
	47	A47FinFacil	Financial intermediation facilitation services		
	48	A48RealEst	Real estate related services		
	49	A49VehServ	Vehicles and equipment lease without operator and personal effects and household goods lease services		
	50	A50CompServ	Computer and computer-related services		
	51	A51RnDServ	Research and developments services		
	52	A52OthPrSrv	Other consumer services		
	53	A53PubAdmin	Public administration and defense as a whole services; compulsory social maintenance services		
	54	A54Educaton	Education services		
	55	A55HlthServ	Health and social services		
	56	A56Sanitary	Drainage, waste disposal, sanitization and other services		
	57	A57MembOrgs	Member organizations services not referred to other groups		
	58	A58Recreatn	Recreation arrangements related services		
	59	A59OthrServ	Other services		
	60	A60HHldServ	Household services		
	61	A61ExtrOrgs	Extra-territorial organizations and authorities services		
Commodities	62	C01Agric	Products of agriculture and hunting and related services		
	63	C02Forest	Products of forestry and timber production and related services		
	64	C03Fishery	Fish and other fishery products; fishery and fish-breeding related services		
	65	C04Coal	Coal and lignite; peat		
	66	C05OilGas	Crude oil and natural gas; services connected with petroleum and gas extraction, except exploration.		
	67	C06MetalOre	Metal ores		
	68	C07OthrMing	Other mining and quarrying products		
	69	C08ProcFood	Foodstuffs and beverage food		
	70	C09Tobacco	Tobacco goods		
	71	C10Textiles	Textiles		
	72	C11Apparel	Garments; furs		
	73	C12Leather	Leather and leather goods		
	74	C13WdProd	Wood, woodworks and corkwoodwork (except furniture), straw- and other wicker-work		
	75	C14Paper	Cellulose, paper and paper products		
	76	C15Printing	Printed matters and information media		
	77	C16RefPetr	Coke, petroleum derivatives and other fuel		
	78	C17Chemical	Chemical agents, chemical products and chemical fibres		
	79	C18Plastic	Rubber and plastics		
	80	C19OthMinrl	Other non-metal mineral products		
	81	C20Metals	Parent metals		
	82	C21FabMetal	Fabricated metal products, except machines and equipment		

MicroSAM Institutions					
		Label	Definition		
	83	C22Machinry	Machines and equipment not referred to other groups		
	84	C23Technlgy	Office appliances and computer facilities (computers)		
	85	C24ElecEquip	Electrical equipment and installation not referred to other groups		
	86	C25TelcmTV	Radio, television and communication equipment and apparatus		
	87	C26MedTech	Medical equipment and facilities, measuring and optical devices, watch and clocks		
	88	C27Vehicle	Motor cars, trailers and semi-trailers		
	89	C28OthTrnsp	Other transports		
	90	C29OthMfg	Furniture; other manufactured products not referred to other groups		
	91	C30Recyclng	Recycling services		
	92	C31Utility	Power, gas and hot water		
	93	C32Water	Collected and treated water, water distribution services		
	94	C33Construc	Building and construction work		
	95	C34Transprt	Motor cars and motorcycles trade, maintenance and repair; motor fuel retail trade services		
	96	C35WhlTrdSv	Wholesale and commission business services, except automobile and motorcycle business		
	97	C36RetTrdSv	Retail trade services, except automobile and motorcycle business; personal effects and household goods repair services		
	98	C37Hotel	Hotel, camping and other accommodation services		
	99	C38Restmnt	Food and beverage providing services		
	100	C39FoodServ	Canteens and meals delivery services		
	101	C40TrnsLand	Transportation by land services and pipeline transportation		
	102	C41TrnsWat	Water transport services		
	103	C42TrnsAir	Air transport services		
	104	C43PassServ	Passenger traffic services		
	105	C44PTT	Post and electrical communication services		
	106	C45Finance	Financial intermediation, except insurance and provision of pensions, services		
	107	C46Insurnce	Insurance and provision of pensions, except compulsory social maintenance services		
	108	C47FinFacil	Financial intermediation facilitation services		
	109	C48RealEst	Real estate related services		
	110	C49VehServ	Vehicles and equipment lease without operator and personal effects and household goods lease services		
	111	C50CompServ	Computer and computer-related services		
	112	C51RnDServ	Research and developments services		
	113	C52OthPrSrv	Other consumer services		
	114	C53PubAdmin	Public administration and defense as a whole services; compulsory social maintenance services		
	115	C54Educaton	Education services		
	116	C55HlthServ	Health and social services		
	117	C56Sanitary	Drainage, waste disposal, sanitization and other services		
	118	C57MembOrgs	Member organizations services not referred to other groups		
	119	C58Recreatn	Recreation arrangements related services		
	120	C59OthrServ	Other services		
	121	C60HHldServ	Household services		
	122	C61ExtrOrgs	Extra-territorial organizations and authorities services		
Margins	123	MargWhl	Wholesale trade margin		

MicroSAM Institutions					
		Label	Definition		
Factors	124	MargRet	Retail trade margin		
	125	MargTrn	Transportation margin		
	126	Labor	Labor		
	127	Capital	Capital		
	128	Depr	Depreciation		
Households	129	HAkmolR	Akmolinskaya	Rural	
	130	HAkmolU		Urban	
	131	HAktubR	Aktubinskaya	Rural	
	132	HAktubU		Urban	
	133	HAlmatR	Almatinskaya	Rural	
	134	HAlmatU		Urban	
	135	HAtyrauR	Atyrauskaya	Rural	
	136	HAtyrauU		Urban	
	137	HVostoR	Vostochno-Kazakhstan-skaya	Rural	
	138	HVostoU		Urban	
	139	HZhamR	Zhambylskaya	Rural	
	140	HZhamU		Urban	
	141	HZapadR	Zapadno-Kazakhstanskaya	Rural	
	142	HZapadU		Urban	
	143	HKaragR	Karagandinskaya	Rural	
	144	HKaragU		Urban	
	145	HKostaR	Kostanaiskaya	Rural	
	146	HKostaU		Urban	
	147	HKyzylR	Kyzylordinskaya	Rural	
	148	HKyzylU		Urban	
	149	HMangisR	Mangistauskaya	Rural	
	150	HMangisU		Urban	
	151	HPavloR	Pavlodarskaya	Rural	
	152	HPavloU		Urban	
	153	HSeveroR	Severo-Kazakhstan-skaya	Rural	
	154	HSeveroU		Urban	
	155	HYuzhnoR	Yuzhno-Kazakhstan-skaya	Rural	
	156	HYuzhnoU		Urban	
	157	HAstCityU	Astana city	Urban	
	158	HAlmCityU	Almaty city	Urban	
	159	ENT	Enterprise		
	160	GOV	Government		
	161	VTAX	Value Added Tax		
	162	TTAX	Trade Taxes		
	163	ITAX	Indirect or Producer Taxes		
	164	SUBSID	Subsidies		
	165	FTAX	Factor Taxes		
	166	DTAX	Direct or Income Taxes		

MicroSAM Institutions					
		Label	Definition		
	167	GIV	Government Capital Account		
	168	SIN	Private Capital Account		
	169	Invn	Inventories		
	179	TRDROW	Rest of the World		
	180	Total	Total		