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## RESEARCH ARTICLE

### SOCIAL ACCOUNTING MATRIX FOUNDED ON SYSTEM OF NATIONAL ACCOUNTING: CASE OF MEXICO

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#### ABSTRACT

Links between institutional sectors and economic activities with National Accounting System of Mexico are studied used accounting multipliers. Key sectors had changed to strategic or leading as oil and gas extraction and dairy product manufacturing, i.e., Mexico went from a producer of goods to a service provider country, losing value added in their production chains. The mixed income for deciles 1-5 for woman is leading and independent economic activity of real importance in the domestic economy through its impact on solidarity activities: Providing care and support and provide food.

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#### INTRODUCTION

The proposed social accounting matrix (SAM) (Erik Thorbecke, 2000) is founded on economic structure of the system of national accounting of Mexico (SNAM) (System of National Accounting of Mexico, 2011). The square matrix size is 565 and showed in Table 1. The name variables and their code appear in tables 20-25. The SNAM comprises balance equations and accumulation and current accounts. National accounting: Goods and services (G&S), production (P), generation of income (GI), allocation of income (PAI), distribution of income (DI), use of income (UI), capital (C), gross fixed capital formation (GFCF), financial (F), goods and services with the outside (G&S outside). The latter account is divided: current transferences (TC) and capital transferences (TK). SNAM has Institutional units: Non-financial corporations (NF), Financial corporations (F), Government units, including social security funds (G), Non-Profit Institutions serving households (NPIsSH), Households (H) and the rest of the world (RW). Households are formed by customers and producers. The GI, PAI, DI, UI, C and GFCF accounts were disaggregated on institutional sectors. Household sector is broken down income-expenditure deciles. The input-output tableau (IOT) is included into SAM.

The IOT is built by economic activities added into sectors, subsectors and branches. IOT use the North America industrial Classification System (NAICS) code of 2007. The tableau size is 165. The production account presents economic activities by branches. The goods and services account shows economics activities and institutional sectors. IOT 2011 was obtained using the RAS method to IOT 2008. Table 2 shows  $a_{ij}$  entrances of the SAM and their description. Table 3 presents disaggregated IOT. Each of the  $a_{ij}$  entrances are  $A_{ij}$  matrix of different sizes described in the Table 2.

The  $a_{1,10}$  and  $a_{10,1}$  entrances were disaggregated to economic activities branches and North American Free Trade Agreement (NAFTA) countries and the rest of the world. To do this was necessary to make the correspondence between the tariff code (<http://www.economia.gob.mx/comunidad-negocios/comercio-exterior/informacion-estadistica-y-arancelaria>) and NAICS code (<http://www.census.gov/eos/www/naics/>) because export and import of good and services are not present for countries in SNAM. The  $a_{1,2}$  and  $a_{2,1}$  entrances were open to economic activities branches. The first is IOT 2011 and the second is gross production value (basic prices). The  $a_{10,3}$ ,  $a_{10,4}$ ,  $a_{10,5}$ ,  $a_{3,10}$ ,  $a_{4,10}$  and  $a_{5,10}$  entrances: remunerations, rental of property and current transfers received/paid were broken down by NAFTA country redistribution like flows of Outward/Inward Direct Investment ([http://w03.international.gc.ca/Commerce\\_International/Commerce\\_Country-Pays.aspx?lang=eng](http://w03.international.gc.ca/Commerce_International/Commerce_Country-Pays.aspx?lang=eng) & <http://w03>.

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international.gc.ca/Commerce\_International/Commerce\_Indicator-Indicateur.aspx?lang=eng). Consumption of fixed capital (CFC), Taxes less subsidies on products and Adjustment by rounding are distributed as gross valued added. Capital transferences received/paid and current transferences paid are not known. Adjustment due to changes to pension rights received/paid from/to the rest of the

world ( $a_{6,10}$ ,  $a_{10,6}$ ) were adjusted few years ago. These changes were consequence of the Pension Reform at 1996. Lending or financing and Current external balance have same value but the sign changed,  $a_{11,11}$  is null. The Net factor income from/to the rest of the world (NFIRW), is disaggregated from the cell  $a_{3,2}$  so should be adjusted in the successive cells.

**Table 1. Social accounting matrix (SAM) founded in the system of national accounting of Mexico (SNAM).**

Current Millions pesos (MXN)		Goods and services (G&S)	Production (P)	Generation of income (GI)	Primary allocation of income (PAI)	Distribution of income (DI)	Use of income (UI)	Capital (C)	Gross fixed capital formation (GFCF)	Financial (F)	THE REST OF THE WORLD (G&S outside) Current transferences (TC)	THE REST OF THE WORLD (G&S outside) Capital transferences (TK)	Adjustment (Adj)	TOTAL	
SUPPLY	Goods and services (G&S)		(1,2) 10,281,289				(1,6) 11,333,634	(1,7) 73,542	(1,8) 3,165,020		(1,10) 4,545,385		(1,12) 147,667	29,546,537	
	Production (P)	(2,1) 24,312,132												24,312,132	
DEMAND: HOUSEHOLDS, GOVERNMENT, NON-FINANCIAL CORPORATIONS, FINANCIAL CORPORATIONS AND NON-PROFIT INSTITUTIONS SERVING HOUSEHOLDS	Generation of income (GI)		(3,2) 12,411,725				(4,6) 6,698,152				(3,10) 9,780			12,421,505	
	Primary allocation of income (PAI)	(4,1) 506,080		(4,3) 12,421,505			(4,6) 6,698,152				(4,10) 120,682			19,746,419	
	Distribution of income (DI)				(5,4) 12,850,248		(5,6) -285,359				(5,10) 287,545		(5,12) 135,116	12,987,550	
	Use of income (UI)				(6,4) 6,470,571	(6,5) 12,985,364	(6,6) 246,006				(6,10) 0			19,701,941	
	Capital (C)						(7,6) 1,651,730	(7,7) 0		(7,9) 4,179,407		(7,11) 0	(7,12) 73,542	5,904,679	
	Gross fixed capital formation (GFCF)		(8,2) 1,619,117				(8,7) 1,767,112					(9,10) 727,464			3,386,229
	Financial (F)						(9,7) 4,064,025								4,791,489
EXTERNAL	THE REST OF THE WORLD (G&S outside) Current transferences (TC)	(10,1) 4,728,326		(10,3) 0	(10,4) 348,262	(10,5) 2,186	(10,6) 0			(10,9) 612,082	(10,10) 182,940			5,873,796	
	THE REST OF THE WORLD (G&S outside) Capital transferences (TK)						(11,7) 0					(11,11) 0		0	
	Adjustment (Adj)	-1	1		(12,4) 77,338		(12,6) 57,778		(12,8) 221,209					356,325	
	TOTAL	29,546,537	24,312,132	12,421,505	19,746,419	12,987,550	19,701,941	5,904,679	3,386,229	4,791,489	5,873,796	0	356,325		

**Table 2. SAM compounds. Matrix 565x565.**

$a_{ij}$ - SAM aggregated	Name	$a_{ij}$ - SAM aggregated	Name	$a_{ij}$ - SAM aggregated	Name	$a_{ij}$ - SAM aggregated	Name
(1,2)	Intermediate consumption	(4,3)	Net value added + remuneration received from the rest of the world (RRRW) (includes net mixed income)	(10,4)	Rental of property paid to the rest of the world	(10,6)	Adjustment due to changes to pension rights received from the rest of the world
(1,6)	Final consumption			(12,4)	Adjustment: NFIRW + RRRW		
(1,7)	Changes in inventories (ChI)			(7,7)	Capital transfers		
(1,8)	Gross fixed capital formation	(10,3)	Remuneration paid to the rest of the world	(5,6)	Net current transfers	(7,9)	Net issuance of financial liabilities to domestic economy
(1,10)	Exports of goods and services	(4,6)	Rental of property from domestic economy (assets)	(5,10)	Current transfers received from the rest of the world	(7,12)	Adjustment: ChI
(1,12)	Statistical discrepancy (SD)			(6,5)	Adjustment net national income	(8,7)	Net capital formation
(2,1)	Gross value of production	(4,10)	Rental of property received from the rest of the world	(10,5)	Current transfers sent to the rest of the world	(9,7)	Net acquisition of financial assets from domestic economy
(4,1)	Taxes less subsidies on products			(6,6)	Adjustment due to changes to pension rights	(11,7)	Capital transfers received from the rest of the world
(10,1)	Imports of goods and services			(6,10)	Adjustment due to changes to pension rights paid to the rest of the world	(12,8)	Adjustment: ChI + SD
(12,1)	Discrepancies	(6,4)	Rental of property from domestic economy (liabilities)	(7,6)	Net saving	(9,10)	Net acquisition of financial assets from the rest of the world
(3,2)	Net value added			(7,11)	Capital transfers sent to the rest of the world	(10,9)	Net issuance of financial liabilities to the rest of the world
(8,2)	Consumption of fixed capital (CFC)			(11,11)	Lending or financing/Current external balance	(12,1)	Adjustment by rounding
(3,10)	Remuneration received from rest of world						
(10,10)	External balance of goods and services						

**Table 3. IOT compounds. Matrix 165x165**

SECTOR	A <sub>12</sub> - SAM aggregated = OIT	NAICS CODE	Number of accounts
11	Agriculture, hunting, forestry, fishing	1111-1114, 1119, 1121, 1122-1125, 1129, 1131-1133, 1141, 1142, 1151-1153.	19
21	Mining and quarrying	2111, 2121-2123, 2131.	5
22	Electricity, gas and water supply	2211, 2221, 2222.	3
23	Construction	23, 2361, 2362, 2371-2373, 2379, 2381-2383, 2389.	1
31-33	Manufacturing	3111-3119, 3121, 3122, 3131-3133, 3141, 3149, 3151, 3152, 3159, 3161, 3162, 3169, 3211, 3212, 3219, 3221, 3222, 3231, 3241, 3251-3256, 3259, 3261, 3262, 3271-3274, 3279, 3311-3315, 3321-3329, 3331-3336, 3339, 3341-3346, 3351-3353, 3359, 3361-3369, 3371, 3372, 3379, 3391, 3399.	86
43-46	Commerce	43-46: 4311.	1
48	Transport and communications	4862, 4869, and the rest of the sector 48 : 4811, 4812, 4821, 4832, 4841, 4851-4855, 4859, 4871, 4872, 4879, 4881-4885, 4889.	3
49	Mail and storage	49: 4911, 4921, 4931.	1
51	Mass media information	51: 5111, 5112, 5121, 5122, 5151, 5152, 5171, 5172, 5174, 5179, 5182, 5191.	1
52	Financial services and of insurances	5211, 5221-5225, 5231, 5332, 5239, 5241, 5242.	11
53	Real-estate and rental of personal property and intangible services	53: 5311-5313, 5321-5324, 5331.	1
54	Professional, scientific and technical services	54: 5411-5419, 5511.	1
55	Management of companies and enterprises	55: 5511.	1
56	Waste management and remediation services	5621, and the rest of the sector 56: 5611-5617, 5619.	2
61	Educational services	61: 6111-6117.	1
62	Health and social care	6214, 6216, the rest of the sub-sector 621: 6211-6213, 6215, 6219; 6221-6223, 6231-6233, 6239, 6241-6244.	14
71	Cultural and sporting services, recreation, and other recreational services	71: 7111-7115, 7121, 7131, 7132, 7139.	1
72	Temporary accommodation services and preparation of foods and beverages	72: 7211-7213, 7221-7224.	1
81	Other services except government activities	8141 and the rest of the sector 81: 8111-8114, 8121-8124, 8129, 8131, 8132.	2
93	Activities of the Government and activities of international organizations and offshore	9311-9318, 9321.	9
	Direct net purchases of residents and non-residents		1
	Total		165

## MATERIALS AND METHODS

Accounting multipliers and linkages use Leontief (Erik Thorbecke, 2000), (Gaspar Núñez, 2008), (Kijong Kim, 2008), (Rodolfo Minzer - Valentín Solís, 2014), (Ángel Fernando Pineda Solís, 2011) theory. Because of revised data appear up to 2011, the SAM and IOT were calculated for 2011. Links and relations between economic sectors and branches involve the input-output tableau, the distribution by countries and industry of goods and services of imports and exports in the balance of trade (BT) and balance of payments (BP) and the relationship between institutional sectors and branches of economic activity make a system of accounting balance equations.

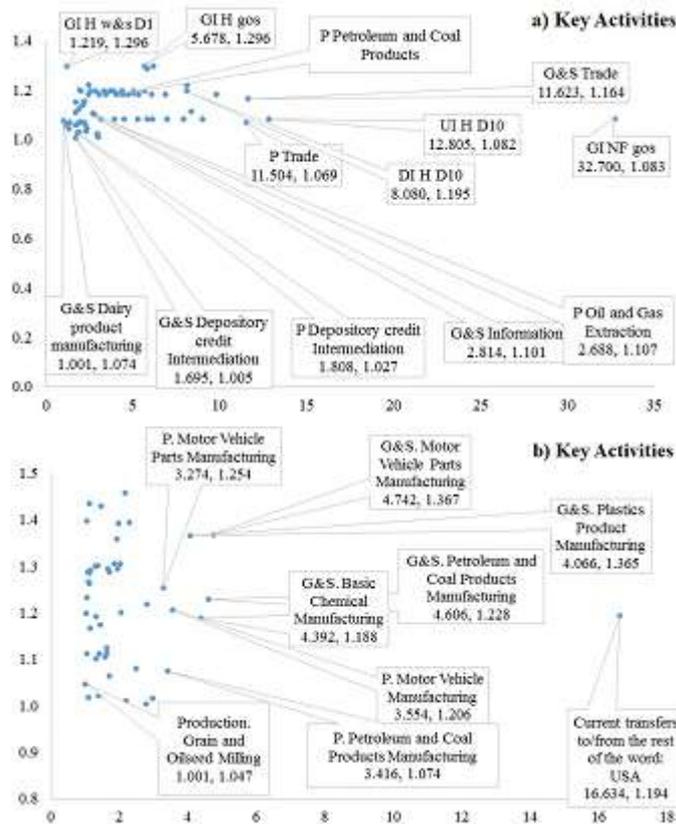
Data between economic and institutional sectors through SNAM were used to redistribution cells  $a_{3,2}$ ;  $a_{4,3}$ ;  $a_{5,4}$ ;  $a_{6,5}$ ;  $a_{6,4}$ ;  $a_{4,6}$ ;  $a_{7,6}$ ;  $a_{7,9}$ ;  $a_{8,7}$ ;  $a_{9,7}$  and  $a_{9,10}$ . Households were open by deciles of income and mixed income was disaggregated by sex for the first five deciles of income and by i) provide food, ii) provide cleaning and maintenance of housing, iii) provide

cleaning and care of clothing and shoes, iv) provide shopping and household management, v) providing care and support and, vi) provide help to other households and volunteer work. The redistributions used National Income and Expenditure Survey of Households (Encuesta Nacional de Ingreso y Gasto de los Hogares, ENIGH 2012). The ENIGH is biannual. Two assumptions were worked: a) the G&S outside account is an exogenous variable and b) It is an endogenous variable. These assumptions are because the SNAM does not provide information of the production of narcotics (cannabis, poppy) in gross domestic product (GDP) and intermediate consumption (IOT) and their impact on the ENIGH. Because of this, the lower deciles are underestimated. Many families work for drug trafficking as distributors and/or producers. The families work a portion of the land for poppy and cannabis and one for beans, corn, sorghum and other legal crops. Some of the medium and upper deciles are money lauder through their companies. The rich do not respond to interviewers, they are also underestimated. The discrepancies between current transfers received by households (reported by ENIGH) and total transferences reported by BP (calculated with financial system data) reveal the lack of response of households. The data in ENIGH are smaller than data in BP. Also, the BP does not record earnings of Mexican producers abroad, for example, Televisa, CEMEX, Bimbo, Vitro Group, etc. The lack of registration of the minerals of iron production and its exchanging by chemicals to produce drugs, by cartels of drugs and Chinese bussines man, production, internal distribution, export and transfer of drugs, do not appear in BP and BT, in addition, trafficking in persons and smuggling of weapons, appear not quantified in both of them BP and BT.

## RESULTS

The fixed-price multiplier analysis are showed in the figures 1-4 for key, strategic, leading and independent activities, respectively. For each assumption: a) The rest of the world likes exogenous variable and, b) The Rest of the world likes endogenous variable. From figure 1a and tables 8-9, when the G&S outside account is exogenous variable, the GI account impact on two items: the gross operating surplus (GOS) and wage and salaries of non-financial companies and household for deciles 1-6 (current transferences), for the deciles 7-10 the impact is in PIA, DI and UI accounts: remunerations, current transferences, rental of properties and savings. The government supports housing credit through financial institutions, publics (Housing Fund for Institute for Social Security and Services for State Workers (FOVISSSTE) and Institute of National Housing Fund for Workers (INFONAVIT)) and privates. Also, the government supports programs for entrepreneurs and self-employment. The population with income between deciles 4 and 9 are benefited with these programs. The "Crusade against hunger" program is aimed at people in the income decile 1. The wholesale trade & retail trade and the real estate and rental and leasing are more impactful than oil and gas extraction and petroleum and coal products manufacturing production respect to the gross value of production (GVP). Mexico has become a trade and service country and does not remain as producer of goods. The

strength of the domestic economy was sacrificed to maintain stable macroeconomic variable by through free trade agreements (FTAs). The sector 48 and 81, transport and other services except public administration, and subsector 561, administrative and support services were profited during this change. The sectors of electric power generation, transmission and distribution, basic chemical manufacturing, bakeries and tortilla manufacturing, animal slaughtering and processing, oilseed and grain farming and dairy product manufacturing become constant or traditional. The Information sector growth is due to technological development.



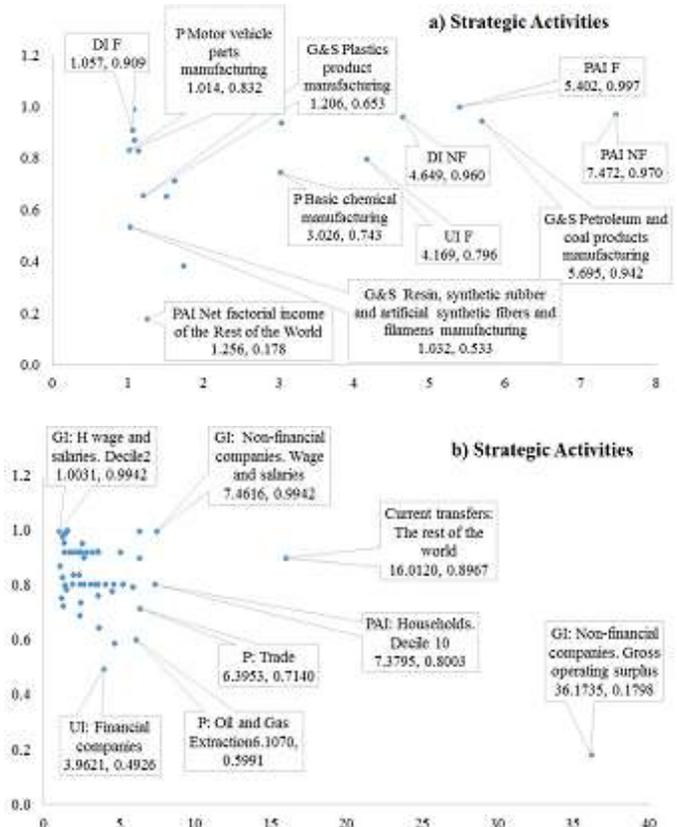
**Fig 1. The fixed-price multiplier analysis. Key activities. a) Goods and services with outside account likes exogenous variable. b) Goods and services with outside account likes endogenous variable**

From figure 1b and tables 8-9, the current transfers to/from the USA have the most impact into Mexican economy. It is followed by motor vehicle parts manufacturing, petroleum and coal products manufacturing, basic chemical manufacturing, motor vehicle manufacturing and electric power generation, transmission and distribution. Before current transferences for household decile 10 appear iron and steel mills and ferroalloy manufacturing, resin, synthetic rubber and artificial synthetic fibers and filaments manufacturing, steel manufacturing from purchased steel, semiconductor and video equipment manufacturing, and animal slaughtering and processing. Analogously for the rest of economic sectors, subsectors and branches like assumption a). From tables 8-9, the key activities that strengthen the internal market are showed in table 4. The G&S and production accounts are related to the IOT and the gross value of production (GVP), respectively. Petroleum and coal products manufacturing have been the strongest

support of the Mexican economy until now. The production chains have been losing in the country. Mexico has changed from a producer to a service country. The habits of Mexicans are reflected in how industries of bottled drinks and bread and tortillas have become key activities. The animal slaughtering and processing and beverage manufacturing are industries that have increased their gross value added (GVA). Transport, information, basic chemical manufacturing and electric sectors are key to economic development.

**Table 4. Key activities that appear with assumptions a) and b)**

Code	Description
r26-3241	P. Petroleum and Coal Products Manufacturing
r28-RESTO 48	G&S. 4811 Scheduled Air Transportation, 4812 Nonscheduled Air Transportation, 4821 Rail Transportation, 4832 Inland Water Transportation, 4841 General Freight Trucking, 4851-4855 (Urban Transit Systems, Interurban and Rural Bus Transportation, Taxi and Limousine Service, School and Employee Bus Transportation, Charter Bus Industry), 4859 Other Transit and Ground Passenger Transportation, 4871 Scenic and Sightseeing Transportation, Land, 4872 Scenic and Sightseeing Transportation, Water, 4879 Scenic and Sightseeing Transportation, Other, 4881-4885 (Support Activities for Air Transportation, Support Activities for Rail Transportation, Support Activities for Water Transportation, Support Activities for Road Transportation, Freight Transportation Arrangement), 4889 Other Support Activities for Transportation.
r7-RESTO 48	P. 4811, 4812, 4821, 4832, 4841, 4851-4855, 4859, 4871, 4872, 4879, 4881-4885, 4889.
r26-3251	P. Basic Chemical Manufacturing
r3-2211	G&S. Electric Power Generation, Transmission and Distribution
r9	G&S. Information
r5-3116	G&S. Animal Slaughtering and Processing
r26-3116	P. Animal Slaughtering and Processing
r26-3121	P. Beverage Manufacturing
r5-3121	G&S. Beverage Manufacturing
r5-3118	G&S. Bakeries and Tortilla Manufacturing



**Fig 2. The fixed-price multiplier analysis. Strategic activities. a) Goods and services with outside account likes exogenous variable. b) Goods and services with outside account likes endogenous variable.**

From figure 2a and table 10, the rental of properties of non-financial companies is the economic activity more strategic. It is following for financial companies and NFIRW. The GVP of petroleum and coal products manufacturing, plastics product manufacturing and resin, synthetic rubber and artificial synthetic fibers and filaments manufacturing are strategic activities for assumption a) and key under assumption b). The current transferences of non-financial companies and the rental of properties of financial companies are strategic activities whereas households are key activities. The intermediate consumption of manufacturing of petroleum and coal, basic chemical, motor vehicle parts and resin, synthetic rubber, artificial synthetic fibers and filaments are medium strategic activities whereas they are key activities under assumption b). From figure 2b and table 10, when G&S outside account is endogenous variable, the GOS of non-financial companies is the strongest strategic activity. Secondly, the current transferences from/to RW. The adjustment net national income and rental of the properties are strategic activities for all deciles of income for household whereas they are key activities on the assumption a).

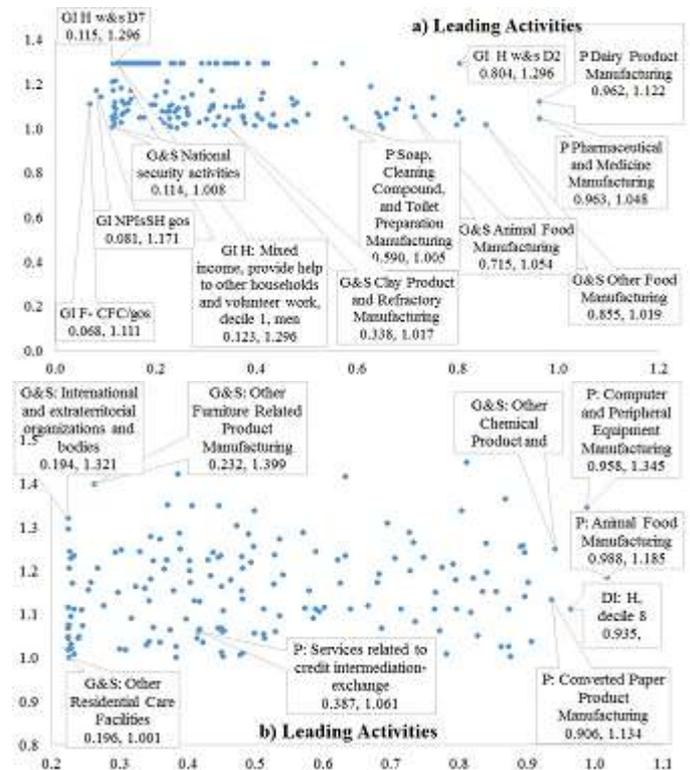
The flows of production (IOT, intermediate consumption) and the GVP of oil and gas extraction, real estate and rental and leasing; professional, scientific and technological services and, the rest of 561 are medium and low strategic activities. The wages and salaries of decile 1 and 2 of income are strategic activities. These activities impact to government support programs and outsourcing jobs. From table 10, the strategic activities that strengthen the internal market are showed in table 5. The PAI account is related to net value added (NVA) and rental of property from domestic economy (assets/liabilities), explicitly. It implicitly includes the gross mixed income (GMI) and gross operating surplus (GOS). These appear in generation of income account. In the case of UI account are present the adjustment net national income includes net factor income from/to RW. And, in the DI account is the CFC, net taxes on products subsidies and current transferences. The companies are strategic institutional sectors, the factor income and CFC impact on the financial companies. The GVP of economic subsector 561, administrative and support services, is linked with companies and government through offer/require services. The government is a big consumer of outsourcing services.

**Table 5. Strategic activities that appear with assumptions a) and b)**

Code	Description
r44-NF	PAI: Non-financial
r44-F	PAI: Financial companies
r46-F	UI: Financial companies
r35-561	P: THE REST OF THE SUB-SECTOR561: Administrative and Support Services
r45-F	DI: Financial companies

From figure 3a and tables 11-14, the more intensive leading economic activities are the manufacturing of pharmaceutical and medicine, dairy products, animal food, sugar and confectionery products, other food, iron and steel

mills and ferroalloy, other crop farming and cattle ranching and farming in production and intermediate consumption. The wage and salaries of household decile 2 of income and financial companies and the effective employer contribution for non-pension of non-financial companies are link to construction sector like leading activity.



**Fig 3. The fixed-price multiplier analysis. Leading activities. a) Goods and services with outside account likes exogenous variable. b) Goods and services with outside account likes endogenous variable**

Secondarily, financial sector has leading activities through of management of companies and enterprises, securities and commodity contracts intermediation and brokerage, non-depository credit intermediation and insurance carriers. Thirdly, the mixed income for sex and kind of activity impact likes leading economic branch: providing care and support for woman for deciles 3, 2, 4, 1 and 5, in this order. It follows the provide food for woman for deciles 5-1. These are independent activities on the assumption b). The NPIsSH are leading by imputed contribution by employers for non-pension. The medium class is the leading class of mexican economy. From figure 3b and tables 11-14, when G&S outside account is endogenous variable, the manufacturing of animal food, computer and peripheral equipment, other chemical product and preparation, converted paper product are leading activities. Also, current transferences from/to household with deciles 1-8 of income are this kind of activity. Under assumption b) they are key activities. This is migration effect to USA mostly. A large number of primary and secondary activities are independent: pesticide, fertilized and other agricultural chemical, alumina and aluminum production and processing, manufacturing of dairy product, poultry and eggs production, cattle ranching and farming, medical equipment and supplies, soap, cleaning compound and toilet preparation, household appliance, printing and related

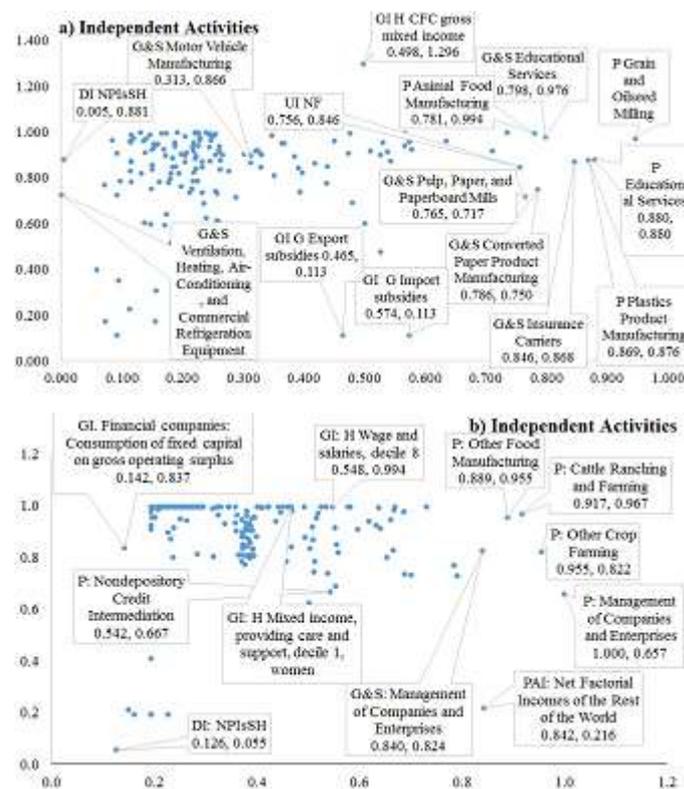
support activities, among other activities. From tables 11-14, the leading activities that strengthen the internal market are showed in table 6. They are mainly secondary activities, few primary activities and many government activities. The secondary activities impact in GVP and primary, thirdly and government activities in flow of production or intermediate consumption.

**Table 6. Leading activities that appear with assumptions a) and b)**

Code	Description
r26-3115	P:Dairy Product Manufacturing
r5-3119	G&S: Other Food Manufacturing
r26-3113	P: Sugar and Confectionery Product Manufacturing
r1-1119	G&S: Other Food Manufacturing
r26-3328	P: Coating, Engraving, Heat Treating, and Allied Activities
r26-3326	P: Spring and Wire Product Manufacturing
r26-3161	P: Leather and Hide Tanning and Finishing
r26-3117	P: Seafood Product Preparation and Packaging
r41-9321	P: International and extraterritorial organizations and
r26-3212	P: Veneer, Plywood, and Engineered Wood Product Manufacturing
r1-1153	G&S: Support Activities for Forestry
r5-3274	G&S: Lime and Gypsum Product Manufacturing
r1-1125	G&S: Aquaculture
r10-5239	G&S: Other Financial Investment Activities
r7-4869	G&S: Other Pipeline Transportation
r16-6244	G&S: Child Day Care Services
r10-5232	G&S: Securities and Commodity Exchanges
r2-2131	G&S: Support Activities for Mining
r43-HGMILyMMD1	GI. Household: Mixed income, provide cleaning and maintenance of housing, decile1, men
r1-1153	G&S: Timber Tract Operations
r43-HGMiAMD2	GI. Household: Mixed income, provide food, decile2, men
r1-1125	G&S: Individual and Family Services
r43-NPIsSHws	GI. NPIs SH: Wage and salaries
r20-9321	G&S: International and extraterritorial organizations and bodies
r20-9317	G&S: Foreign affairs
r20-9318	G&S: National security activities

From figures 4a and tables 15-19, the GVP of grain and oilseed milling, educational services, plastic product manufacturing and insurance carriers are the strongest independent activities. On the assumption b) insurance carriers, pulp, manufacturing of animal food and converted paper product are leading activities whereas with assumption a) they are independent activities. The import and export subsidies into GI account are government independent activities. The rental of property of non-financial companies are an intensive independent activity while the intermediate consumption of manufacturing of motor vehicle is under assumption b) key activity. On assumption a), primary activities does not appear as independent except other animal production. Under assumption b) many primary activities are independent, for example, Other crop farming, cattle ranching and farming, vegetable and melon farming, fruit and tree nut farming, logging, etc. Many secondary and thirdly are independent as water collection, treatment and supply of water; steel product manufacturing from purchased steel;

paint, coating and adhesive manufacturing; iron and steel mills and ferroalloy manufacturing, general public administration, regulating and promoting economic development, administrative activities of social welfare institutions, among other activities. From figures 4b and tables 15-19, when G&S outside account is endogenous variable, the management of companies and enterprises, other crop farming and cattle ranching and farming are the most independent intensives activities.



**Fig 4. The fixed-price multiplier analysis. Independent activities. a) Goods and services with outside account likes exogenous variable. b) Goods and services with outside account likes endogenous variable.**

**Table 7. Independent activities that appear with assumptions a) and b).**

Code	Description
r22-1119	P: Other Crop Farming
r15	PAI: Net Factorial Incomes of the Rest of the World
r3-2221	G&S: Water collection, treatment and supply of water
r40-8141	P: Private Households
r37-RESTO621	P: THE REST OF THE SUB-SECTOR621: Ambulatory Health Care Services
r37-6221	P: Fishing
r31-5223	P: Activities Related to Credit Intermediation
r41-9312	P: General public administration
r41-9313	P: Regulating and promoting economic development
r10-5223	G&S. Activities Related to Credit Intermediation
r14-5621	G&S. Waste Collection
r16-6242	G&S. Community Food and Housing, and Emergency and Other Relief Services
r16-6222	G&S. Psychiatric and Substance Abuse Hospitals
r16-6232	G&S. Residential Intellectual and Developmental Disability, Mental Health, and Substance Abuse Facilities
r16-6231	G&S. Nursing Care Facilities (Skilled Nursing Facilities)

Table 8. Key Institutional and Economic Sectors

a) The rest of the world likes exogenous variable				b) The rest of the world likes endogenous variable			
Variable code	Standardized forward linkages	Standardized backward linkages	Name	Variable code	Standardized forward linkages	Standardized backward linkages	Name
r43-NF gos	32.700	1.083	GI. Non-financial companies: gross operating surplus	r50-CT EUA	16.634	1.194	Current transfers to/from the rest of the world: EUA
r46-H D10	12.805	1.082	UI: Household, decile 10	r5-3363	4.742	1.367	G&S. Motor Vehicle Parts Manufacturing
r6	11.623	1.164	G&S: Wholesale Trade & Retail Trade	r5-3241	4.606	1.228	G&S. Petroleum and Coal Products Manufacturing
r27	11.504	1.069	P: Wholesale Trade & Retail Trade	r5-3251	4.392	1.188	G&S. Basic Chemical Manufacturing
r44-H D10	9.787	1.182	PAI: Household, decile 10	r5-3361	4.066	1.365	G&S. Motor Vehicle Manufacturing
r46-H D9	8.983	1.082	UI: Household, decile 9	r26-3361	3.554	1.206	P: Motor Vehicle Manufacturing
r32	8.370	1.114	P: Real Estate and Rental and Leasing	r26-3241	3.416	1.074	P: Petroleum and Coal Products Manufacturing
r11	8.116	1.219	G&S: Real Estate and Rental and Leasing	r26-3363	3.274	1.254	P: Motor Vehicle Parts Manufacturing
r45-H D10	8.080	1.195	DI: Household, decile 10	r28-RESTO 48	2.968	1.015	G&S: 4811, 4812, 4821, 4832, 4841, 4851-4855, 4859, 4871, 4872, 4879, 4881-4885, 4889.
r46-H D8	7.910	1.082	UI: Household, decile 8	r7-RESTO 48	2.802	1.218	P: 4811, 4812, 4821, 4832, 4841, 4851-4855, 4859, 4871, 4872, 4879, 4881-4885, 4889.
r46-H D7	6.942	1.082	UI: Household, decile 7	r26-3251	2.773	1.004	P: Basic Chemical Manufacturing
r44-H D9	6.874	1.182	PAI: Household, decile 9	r3-2211	2.484	1.080	G&S: Electric Power Generation, Transmission and Distribution
r43-NF w s	6.178	1.296	GI. Non-financial companies: wage and salaries	r5-3344	2.279	1.394	G&S: Semiconductor and Other Electronic Component Manufacturing
r46-H D6	6.139	1.082	UI: Household, decile 6	r9	2.197	1.010	G&S: Information
r44-H D8	6.056	1.182	PAI: Household, decile 8	r5-3343	2.173	1.458	G&S: Audio and Video Equipment Manufacturing
r7-RESTO 48	5.807	1.287	G&S: THE REST OF THE SECTOR 48: Transportation	r5-3311	2.049	1.201	G&S: Iron and Steel Mills and Ferroalloy Manufacturing
r46-H D5	5.800	1.082	UI: Household, decile 5	r5-3261	2.019	1.305	G&S: Plastics Product Manufacturing
r45-H D9	5.681	1.195	DI: Household, decile 9	r5-3342	1.957	1.392	G&S: Communications Equipment Manufacturing
r43-H gos	5.678	1.296	GI: Household: Gross operating surplus	r5-3314	1.938	1.295	G&S: Nonferrous Metal (except Aluminum) Production and Processing
r44-H D7	5.318	1.182	PAI: Household, decile 7	r5-3341	1.915	1.358	G&S: Computer and Peripheral Equipment Manufacturing
r46-H D4	5.271	1.082	UI: Household, decile 4	r5-3252	1.833	1.305	G&S: Resin, Synthetic Rubber, and Artificial Synthetic Fibers and Filaments Manufacturing
r28-RESTO 48	5.066	1.186	P: THE REST OF THE SECTOR 48: Transportation	r1-1111	1.707	1.064	G&S: Oilseed and Grain Farming
r45-H D8	5.007	1.195	DI: Household, decile 8	r5-3359	1.693	1.288	G&S: Other Electrical Equipment and Component Manufacturing
r44-H D6	4.706	1.182	PAI: Household, decile 6	r5-3116	1.645	1.295	G&S: Animal Slaughtering and Processing
r46-H D3	4.488	1.082	UI: Household, decile 3	r26-3314	1.636	1.123	P: Nonferrous Metal (except Aluminum) Production and Processing

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r44-H D5	4.448	1.182	PAI: Household, decile 5	r26-3116	1.625	1.113	P: Animal Slaughtering and Processing
r45-H D7	4.399	1.195	DI: Household, decile 7	r5-3312	1.584	1.104	G&S: Steel Product Manufacturing from Purchased Steel
r26-3241	4.213	1.185	P: Petroleum and Coal Products Manufacturing	r26-3343	1.450	1.429	P: Audio and Video Equipment Manufacturing
r44-H D4	4.044	1.182	PAI: Household, decile 4	r26-3261	1.438	1.174	P: Plastics Product Manufacturing
r46-H D2	3.950	1.082	UI: Household, decile 2	r45-H D10	1.400	1.112	DI: Household, decile 10
r45-H D6	3.895	1.195	DI: Household, decile 6	r26-3121	1.388	1.020	P: Beverage Manufacturing
r45-H D5	3.683	1.195	DI: Household, decile 5	r5-3353	1.350	1.302	G&S: Electrical Equipment Manufacturing
r44-H D3	3.447	1.182	PAI: Household, decile 3	r5-3121	1.307	1.191	G&S: Beverage Manufacturing
r45-H D4	3.350	1.195	DI: Household, decile 4	r5-3254	1.296	1.100	G&S: Pharmaceutical and Medicine Manufacturing
r46-H D1	3.141	1.082	UI: Household, decile 1	r5-3336	1.282	1.299	G&S: Engine, Turbine, and Power Transmission Equipment Manufacturing
r44-H D2	3.037	1.182	PAI: Household, decile 2	r5-3118	1.133	1.167	G&S: Bakeries and Tortilla Manufacturing
r14-561	2.984	1.008	G&S: THE REST OF THE SUB-SECTOR 561: Administrative and Support Services	r5-3329	1.130	1.292	G&S: Other Fabricated Metal Product Manufacturing
r30	2.957	1.022	P: Information	r5-3345	1.110	1.263	G&S: Navigational, Measuring, Electromedical, and Control Instruments Manufacturing
r45-H D3	2.859	1.195	DI: Household, decile 3	r26-3344	1.110	1.434	P: Semiconductor and Other Electronic Component Manufacturing
r9	2.814	1.101	G&S: Information	r5-3221	1.108	1.285	G&S: Pulp, Paper, and Paperboard Mills
r23-2111	2.688	1.107	P: Oil and Gas Extraction	r50-CT Canada	1.100	1.018	Current transfers to the rest of the world: Canada
r45-H D2	2.521	1.195	DI: Household, decile 2	r5-3399	1.081	1.265	G&S: Other Miscellaneous Manufacturing
r2-2111	2.421	1.220	G&S: Oil and Gas Extraction	r5-3222	1.075	1.287	G&S: Converted Paper Product Manufacturing
r44-H D1	2.421	1.182	PIA: Household, decile 1	r26-3342	1.048	1.398	P: Communications Equipment Manufacturing
r24-2211	2.331	1.043	P: Electric Power Generation, Transmission and Distribution	r5-3112	1.037	1.231	G&S: Grain and Oilseed Milling
r12	2.274	1.033	G&S: Professional, Scientific, and Technical Services	r45-H D9	1.037	1.112	DI: Household, decile 9
r33	2.248	1.062	P: Professional, Scientific, and Technical Services	r26-3252	1.014	1.198	P: Resin, Synthetic Rubber, and Artificial Synthetic Fibers and Filaments Manufacturing
r39	2.213	1.070	P: Accommodation and Food Services	r26-3112	1.001	1.047	P: Grain and Oilseed Milling
r5-3116	2.173	1.156	G&S: Animal Slaughtering and Processing				
r3-2211	2.134	1.140	G&S: Electric Power Generation, Transmission and Distribution				
r18	2.075	1.140	G&S: Accommodation and Food Services				
r45-H D1	2.013	1.195	DI: Household, decile 1				
r26-3251	1.966	1.073	P: Basic Chemical Manufacturing				
r26-3116	1.965	1.198	P: Animal Slaughtering and Processing				
r26-3118	1.912	1.029	P: Bakeries and Tortilla Manufacturing				
r5-3118	1.896	1.125	G&S: Bakeries and Tortilla Manufacturing				

Table 9. Key Institutional and Economic Sectors - continuation -

a) The rest of the world likes exogenous variable				b) The rest of the world likes endogenous			
Variable code	Standardized forward linkages	Standardized backward linkages	Name	Variable code	Standardized forward linkages	Standardized backward linkages	Name
r31-5221	1.808	1.027	P: Depository Credit Intermediation				
r40-RESTO 81	1.788	1.063	P: THE REST OF THE SECTOR 81: Other Services (except Public Administration)				
r44-NPIsSH	1.710	1.058	PAI: NPIsSH				
r10-5221	1.695	1.005	G&S: Depository Credit Intermediation				
r19-RESTO 81	1.690	1.150	G&S: THE REST OF THE SECTOR 81: Other Services (except Public Administration)				
r43-F gos	1.682	1.111	GI: Financial companies: gross operating surplus				
r5-3121	1.339	1.067	G&S: Beverage Manufacturing				
r26-3121	1.288	1.044	P: Beverage Manufacturing				
r43-H w s D1	1.219	1.296	GI: Household: Wage and salaries: decile 1				
r22-1111	1.107	1.063	G&S: Oilseed and Grain Farming				
r5-3115	1.001	1.074	G&S: Dairy Product Manufacturing				

Table 10. Strategic Institutional and Economic Sectors

a) The rest of the world likes exogenous variable				b) The rest of the world likes endogenous variable			
Variable code	Standardized forward linkages	Standardized backward linkages	Name	Variable code	Standardized forward linkages	Standardized backward linkages	Name
r44-NF	7.472	0.970	PAI: Non-financial companies	r43-NF gos	36.1735	0.1798	GI: Non-financial companies. Gross operating surplus
r5-3241	5.695	0.942	G&S: Petroleum and Coal Products Manufacturing	r50-CT RW2	16.0120	0.8967	Current transfers: The rest of the world
r44-F	5.402	0.997	PAI: Financial companies	r43-NF w	7.4616	0.9942	GI: Non-financial companies. Wage and
r45-NF	4.649	0.960	DI: Non-financial companies	r44-H D10	7.3795	0.8003	PAI: Households. Decile 10
r46-F	4.169	0.796	UI: Financial companies	r27	6.3953	0.7140	P: Trade
r35-561	3.036	0.938	P: THE REST OF THE SUB-SECTOR 561: Administrative and Support Services	r43-H gos	6.3385	0.9942	GI: Household: Gross operating surplus
r5-3251	3.026	0.743	G&S: Basic Chemical Manufacturing	r6	6.3093	0.8956	G&S: Trade
r5-3344	1.742	0.382	G&S: Semiconductor and Other Electronic Component Manufacturing	r23-2111	6.1070	0.5991	P: Oil and Gas Extraction
r1-1111	1.614	0.714	G&S: Oilseed and Grain Farming	r2-2111	5.9131	0.7929	G&S: Oil and Gas Extraction
r5-3363	1.506	0.653	G&S: Motor Vehicle Parts Manufacturing	r44-H D9	5.2156	0.8003	PAI: Household. decile 9
r44-NFIRW	1.256	0.178	PAI: Net Factorial Incomes of the Rest of the World (NFIRW)	r46-H D10	5.0821	0.9179	UI: Household, decile 10
r5-3261	1.206	0.653	G&S: Plastics Product Manufacturing	r32	4.6916	0.5863	P: Real Estate and Rental and Leasing
r5-3254	1.139	0.829	G&S: Pharmaceutical and Medicine Manufacturing	r44-H D8	4.6079	0.8003	PAI: Household, decile 8
r5-3112	1.080	0.869	G&S: Grain and Oilseed Milling	r11	4.5311	0.7776	G&S: Real Estate and Rental and Leasing
r52_adi	1.076	0.988	Adjustment	r44-H D7	4.0599	0.8003	PAI: Household. decile 7
r45-F	1.057	0.909	DI: Financial companies	r46-F	3.9621	0.4926	UI: Financial companies
r5-3252	1.032	0.533	G&S: Resin, Synthetic Rubber, and Artificial Synthetic Fibers and Filaments Manufacturing	r44-F	3.6472	0.6430	PAI: Financial companies
r26-3363	1.014	0.832	P: Motor Vehicle Parts Manufacturing	r46-H D9	3.6100	0.9179	UI: Household. decile 9

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			r44-H D6	3.6054	0.8003	PAI: Household, decile 6
			r35-561	3.5964	0.7603	P: THE REST OF THE SUB-SECTOR 561: Administrative and Support Services
			r14-561	3.5683	0.9201	G&S: THE REST OF THE SUB-SECTOR 561: Administrative and Support Services
			r44-H D5	3.4136	0.8003	PAI: Household, decile 5
			r46-H D8	3.1966	0.9179	UI: Household, decile 8
			r44-H D4	3.1138	0.8003	PAI: Household, decile 4
			r46-H D7	2.8238	0.9179	UI: Household, decile 7
			r44-H D3	2.6704	0.8003	PAI: Household, decile 3
			r24-2211	2.6392	0.8993	P: Electric Power Generation, Transmission and Distribution
			r12	2.5705	0.9497	G&S: Professional, Scientific, and Technical Services
			r46-H D6	2.5147	0.9179	UI: Household, decile 6
			r33	2.4204	0.7338	P: Professional, Scientific, and Technical Services
			r46-H D5	2.3842	0.9179	UI: Household, decile 5
			r45-F	2.3667	0.6864	DI: Financial companies
			r44-H D2	2.3659	0.8003	PAI: Household, decile 2
			r30	2.3174	0.8363	P: Information
			r46-H D4	2.1802	0.9179	UI: Household, decile 4
			r43-F gos	1.9257	0.8369	GI: Financial companies: Gross operating surplus
			r44-H D1	1.9077	0.8003	PAI: Household, decile 1
			r46-H D3	1.8786	0.9179	UI: Household, decile 3
			r46-H D2	1.6715	0.9179	UI: Household, decile 2
			r26-3311	1.5613	0.9983	P: Iron and Steel Mills and Ferroalloy Manufacturing
			r44-NF	1.5578	-0.0140	PAI: Non-financial
			r23-2122	1.5043	0.7838	P: Metal Ore Mining
			r43-H w s D1	1.4885	0.9942	GI: Households - wage and salaries, Decile 1
			r39	1.4691	0.7896	P: Accommodation and Food Services
			r26-3312	1.4685	0.9931	P: Steel Product Manufacturing from Purchased Steel
			r2-2122	1.4114	0.9851	G&S: Metal Ore Mining
			r40-RESTO 81	1.3837	0.7981	P: RESTO 81 Other Services (except Public Administration)
			r46-H D1	1.3598	0.9179	UI: Household, decile 1
			r18	1.3283	0.9521	G&S: Accommodation and Food Services
			r26-3118	1.3074	0.9798	P: Bakeries and Tortilla Manufacturing
			r31-5221	1.2730	0.7216	P: Depository Credit Intermediation
			r10-5221	1.2427	0.8262	G&S: Depository Credit Intermediation
			r19-RESTO 81	1.2195	0.9768	G&S: RESTO 81: Other Services (except Public Administration)
			r22-1111	1.1587	0.7513	P: Oilseed and Grain Farming
			r26-3254	1.0795	0.8689	P: Pharmaceutical and Medicine Manufacturing
			r43-H w s D2	1.0031	0.9942	GI: Households: wage and salaries, Decile 2

Table 11. Leading Institutional and Economic Sectors

a) The rest of the world likes exogenous variable				b) The rest of the world likes endogenous variable			
Variable code	Standardized forward linkages	Standardized backward linkages	Name	Variable code	Standardized forward linkages	Standardized backward linkages	Name
r26-3254	0.963	1.048	P: Pharmaceutical and Medicine	r26-3111	0.988	1.185	P: Animal Food Manufacturing
r26-3115	0.962	1.122	P: Dairy Product Manufacturing	r26-3341	0.958	1.345	P: Computer and Peripheral Equipment Manufacturing
r5-3119	0.855	1.019	G&S: Other Food Manufacturing	r45-H D8	0.935	1.112	DI: Household, decile 8
r22-1121	0.809	1.044	P: Cattle Ranching and Farming	r5-3259	0.911	1.251	G&S: Other Chemical Product and Preparation Manufacturing
r43-H w s D2	0.804	1.296	GI: Household: Wage and salaries	r26-3222	0.906	1.134	P: Converted Paper Product Manufacturing
r26-3119	0.802	1.075	P: Other Food Manufacturing	r26-3113	0.877	1.037	P: Sugar and Confectionery Product Manufacturing
r25	0.798	1.019	P: Construction	r26-3359	0.871	1.174	P: Other Electrical Equipment and Component Manufacturing
r34	0.753	1.062	P: Management of Companies and Enterprises	r5-3339	0.867	1.242	G&S: Other General Purpose Machinery Manufacturing
r1-1121	0.749	1.139	G&S: Cattle Ranching and Farming	r26-3221	0.866	1.140	P: Pulp, Paper, and Paperboard Mills
r5-3111	0.715	1.054	G&S: Animal Food Manufacturing	r5-3313	0.864	1.259	G&S: Alumina and Aluminum Production and Processing
r22-1123	0.709	1.098	P: Poultry and Egg Production	r5-3253	0.860	1.256	G&S: Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing
r13	0.682	1.132	G&S: Management of Companies and Enterprises	r26-3152	0.845	1.003	P: Cut and Sew Apparel Manufacturing
r31-5241	0.676	1.090	P: Insurance Carriers	r45-H D7	0.843	1.112	DI: Household, decile 7
r26-3113	0.659	1.068	P: Sugar and Confectionery Product Manufacturing	r1-1119	0.843	1.027	G&S: Other Crop Farming
r22-1119	0.650	1.003	P: Other Crop Farming	r5-3111	0.838	1.365	G&S: Animal Food Manufacturing
r1-1119	0.646	1.019	G&S: Other Crop Farming	r26-3115	0.831	1.026	P: Dairy Product Manufacturing
r26-3311	0.645	1.053	P: Iron and Steel Mills and Ferroalloy Manufacturing	r5-3119	0.824	1.153	G&S: Other Food Manufacturing
r5-3113	0.640	1.071	G&S: Sugar and Confectionery Product Manufacturing	r26-3353	0.810	1.196	P: Electrical Equipment Manufacturing
r1-1123	0.627	1.189	G&S: Poultry and Egg Production	r5-3132	0.810	1.264	G&S: Fabric Mills
r26-3256	0.590	1.005	P: Soap, Cleaning Compound, and Toilet Preparation Manufacturing	r10-5241	0.805	1.153	G&S: Insurance Carriers
r38	0.577	1.047	P: Arts, Entertainment, and Recreation	r26-3256	0.796	1.051	P: Soap, Cleaning Compound, and Toilet Preparation Manufacturing
r43-F w s	0.571	1.296	GI: Financial companies: wage and salaries	r5-3152	0.791	1.183	G&S: Cut and Sew Apparel Manufacturing
r43-NFCexnonpension	0.516	1.296	GI: Non-financial companies: effective employer contribution for nonpension	r26-3399	0.787	1.104	P: Other Miscellaneous Manufacturing
r31-5224	0.502	1.064	P: Securities and Commodity Contracts Intermediation and Brokerage	r5-3391	0.781	1.449	G&S: Medical Equipment and Supplies Manufacturing
r17	0.480	1.118	G&S: Arts, Entertainment, and Recreation	r26-3391	0.774	1.338	P: Medical Equipment and Supplies Manufacturing
r29	0.477	1.033	P: Postal Service and Warehousing	r45-H D6	0.766	1.112	DI: Household, decile 6

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r26-3114	0.474	1.108	P: Fruit and Vegetable Preserving and Specialty Food Manufacturing	r26-3336	0.765	1.179	P: Engine, Turbine, and Power Transmission Equipment Manufacturing
r31-5222	0.474	1.036	P: Nondepository Credit Intermediation	r5-3113	0.761	1.216	G&S: Sugar and Confectionery Product Manufacturing
r10-5224	0.471	1.135	G&S: Securities and Commodity Contracts Intermediation and Brokerage	r31-5241	0.751	1.009	P: Insurance Carriers
r22-1113	0.461	1.017	P: Fruit and Tree Nut Farming	r5-3115	0.745	1.208	G&S: Dairy Product Manufacturing
r16-RESTO 621	0.436	1.012	G&S: THE REST OF THE SUB-SECTOR 621: Ambulatory Health Care Services	r22-1123	0.741	1.063	P: Poultry and Egg Production
r23-2123	0.434	1.065	P: Nonmetallic Mineral Mining and Quarrying	r1-1121	0.735	1.150	G&S: Cattle Ranching and Farming
r1-1113	0.428	1.012	G&S: Fruit and Tree Nut Farming	r45-H D5	0.734	1.112	DI: Household, decile 5
r26-3253	0.427	1.017	P: Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing	r5-3256	0.717	1.232	G&S: Soap, Cleaning Compound, and Toilet Preparation Manufacturing
r43-H GMI CyA W D3	0.422	1.296	GI: Household: Mixed income, providing care and support, decile 3, women	r26-3253	0.705	1.083	P: Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing
r43-H w s D8	0.416	1.296	GI: Household: Wage and salaries, decile 8	r26-3352	0.703	1.266	P: Household Appliance Manufacturing
r43-H GMI CyA W D2	0.414	1.296	GI: Household: Mixed income, providing care and support, decile 2, women	r5-3334	0.698	1.200	G&S: Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing
r26-3211	0.413	1.160	P: Sawmills and Wood Preservation	r5-3262	0.697	1.288	G&S: Rubber Product Manufacturing
r31-5242	0.411	1.044	P: Agencies, Brokerages, and Other Insurance Related Activities	r45-H D4	0.684	1.112	DI: Household, decile 4
r22-1133	0.409	1.134	P: Logging	r5-3333	0.675	1.229	G&S: Commercial and Service Industry Machinery Manufacturing
r26-3271	0.403	1.058	P: Clay Product and Refractory Manufacturing	r5-3328	0.664	1.309	G&S: Coating, Engraving, Heat Treating, and Allied Activities
r10-5222	0.401	1.066	G&S: Nondepository Credit Intermediation	r26-3231	0.655	1.067	P: Printing and Related Support Activities
r19-8141	0.396	1.014	G&S: Private Households	r26-3329	0.652	1.193	P: Other Fabricated Metal Product Manufacturing
r43-H GMI CyA W D4	0.383	1.296	GI: Household: Mixed income, providing care and support, decile 4, women	r5-3272	0.649	1.173	G&S: Glass and Glass Product Manufacturing
r43-NF CInonpension	0.382	1.296	GI: Non-financial companies: imputed contribution by employers for nonpension	r26-3132	0.636	1.120	P: Fabric Mills
r5-3114	0.378	1.026	G&S: Fruit and Vegetable Preserving and Specialty Food Manufacturing	r45-H D3	0.609	1.112	DI: Household, decile 3
r26-3272	0.375	1.047	P: Glass and Glass Product Manufacturing	r5-3231	0.602	1.234	G&S: Printing and Related Support Activities
r22-1122	0.372	1.057	P: Hog and Pig Farming	r5-3352	0.602	1.416	G&S: Household Appliance Manufacturing
r8	0.372	1.099	G&S: Postal Service and Warehousing	r26-3328	0.594	1.172	P: Coating, Engraving, Heat Treating, and Allied Activities
r31-5211	0.365	1.124	P: Monetary Authorities-Central Bank	r5-3332	0.592	1.226	G&S: Industrial Machinery Manufacturing
r5-3211	0.365	1.099	G&S: Sawmills and Wood Preservation	r26-3345	0.571	1.116	P: Navigational, Measuring, Electromedical, and Control Instruments Manufacturing

**Table 12. Leading Institutional and Economic Sectors – continuation -**

a) The rest of the world likes exogenous variable				b) The rest of the world likes endogenous variable			
Variable code	Standardized forward linkages	Standardized backward linkages	Name	Variable code	Standardized forward linkages	Standardized backward linkages	Name
r43-H GMI CyA W D1	0.361	1.296	GI. Household: Mixed income, providing care and support, decile 1, women	r26-3255	0.564	1.106	P: Paint, Coating, and Adhesive Manufacturing
r43-H GMI A W D5	0.354	1.296	GI. Household: Mixed income, provide food, decile 5, women	r1-1123	0.559	1.244	G&S: Poultry and Egg Production
r26-3273	0.353	1.097	P: Cement and Concrete Product	r45-H D2	0.558	1.112	DI: Household, decile 2
r43-H GMI CyA W D5	0.346	1.296	GI. Household: Mixed income, providing care and support, decile 5, women	r26-3259	0.555	1.091	P: Other Chemical Product and Preparation Manufacturing
r26-3328	0.344	1.038	P: Coating, Engraving, Heat Treating, and Allied Activities	r5-3211	0.550	1.155	G&S: Sawmills and Wood Preservation
r10-5242	0.339	1.101	G&S: Agencies, Brokerages, and Other Insurance Related Activities	r5-3114	0.543	1.115	G&S: Fruit and Vegetable Preserving and Specialty Food Manufacturing
r5-3271	0.338	1.017	G&S: Clay Product and Refractory	r5-3364	0.540	1.289	G&S: Aerospace Product and Parts Manufacturing
r43-H GMI A W D4	0.338	1.296	GI. Household: Mixed income, provide food, decile 4, women	r26-3324	0.510	1.191	P: Boiler, Tank, and Shipping Container Manufacturing
r26-3314	0.324	1.055	P: Nonferrous Metal (except Aluminum) Production and Processing	r5-3255	0.506	1.272	G&S: Paint, Coating, and Adhesive Manufacturing
r43-H GMI A W D3	0.321	1.296	GI. Household: Mixed income, provide food, decile 3, women	r22-1122	0.505	1.098	P: Hog and Pig Farming
r43-H GMI A W D2	0.318	1.296	GI. Household: Mixed income, provide food, decile 2, women	r26-3131	0.499	1.060	P: Fiber, Yarn, and Thread Mills
r26-3371	0.316	1.015	P: Household and Institutional Furniture	r5-3131	0.498	1.238	G&S: Fiber, Yarn, and Thread Mills
r22-1112	0.314	1.096	P: Vegetable and Melon Farming	r26-3262	0.497	1.169	P: Rubber Product Manufacturing
r4	0.313	1.108	G&S: Construction	r26-3315	0.483	1.046	P: Foundries
r43-NPIsSH Clxnonpension	0.311	1.171	GI. NPIsSH: imputed contribution by employers for nonpension	r26-3162	0.482	1.056	P: Footwear Manufacturing
r26-3122	0.311	1.100	P: Tobacco Manufacturing	r45-H D1	0.481	1.112	DI: Household, decile 1
r22-1141	0.308	1.083	P: Fishing	r26-3326	0.469	1.056	Production: Spring and Wire Product Manufacturing
r43-H GMI A W D1	0.305	1.296	GI. Household: Mixed income, provide food, decile 1, women	r5-3331	0.468	1.337	G&S: Agriculture, Construction, and Mining Machinery Manufacturing
r31-5231	0.301	1.044	P: Brokerage, exchange and exchange centers	r5-3133	0.468	1.255	G&S: Textile and Fabric Finishing and Fabric Coating Mills
r43-H w s D6	0.290	1.296	GI. Household: Wage and salaries, decile 6	r5-3327	0.464	1.220	G&S: Machine Shops; Turned Product; and Screw Nut and Bolt Manufacturing
r1-1133	0.289	1.216	G&S: Hardware Manufacturing	r5-3325	0.460	1.285	G&S: Hardware Manufacturing
r22-1114	0.286	1.030	P: Greenhouse, Nursery, and Floriculture Production	r26-3323	0.452	1.013	P: Architectural and Structural Metals Manufacturing
r1-1122	0.271	1.155	G&S: Cutlery and Handtool Manufacturing	r5-3322	0.452	1.206	G&S: Cutlery and Handtool Manufacturing
r22-1132	0.264	1.060	P: Forest Nurseries and Gathering of Forest Products	r26-3362	0.451	1.136	P: Motor Vehicle Body and Trailer Manufacturing
r26-3219	0.263	1.072	P: Other Wood Product Manufacturing	r26-3364	0.449	1.154	P: Aerospace Product and Parts Manufacturing
r28-4862	0.262	1.075	P: Pipeline Transportation of Natural Gas	r26-3331	0.449	1.233	P: Agriculture, Construction, and Mining Machinery Manufacturing
r22-1124	0.260	1.093	P: Sheep and Goat Farming	r26-3149	0.448	1.007	P: Other Textile Product Mills

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r26-3326	0.259	1.023	P: Spring and Wire Product Manufacturing	r5-3161	0.442	1.304	G&S: Leather and Hide Tanning and Finishing
r22-1153	0.256	1.020	P: Support Activities for Forestry	r26-3161	0.433	1.179	P: Leather and Hide Tanning and Finishing
r26-3161	0.254	1.141	P: Leather and Hide Tanning and Finishing	r5-3271	0.423	1.063	G&S: Clay Product and Refractory Manufacturing
r43-H w s D3	0.253	1.296	GI. Household: Wage and salaries, decile 3	r26-3322	0.422	1.002	P: Cutlery and Handtool Manufacturing
r43-H GMI LyM W D5	0.250	1.296	GI. Household: Mixed income, provide cleaning and maintenance of housing, decile 5, women	r26-3321	0.422	1.109	P: Forging and Stamping
r43-H GMI LyM W D4	0.249	1.296	GI. Household: Mixed income, provide cleaning and maintenance of housing, decile 4, women	r8	0.421	1.061	G&S: Postal Service and Warehousing
r26-3274	0.245	1.050	P: Lime and Gypsum Product Manufacturing	r26-3151	0.420	1.012	P: Apparel Knitting Mills
r22-1125	0.244	1.093	P: Aquaculture	r5-3371	0.420	1.164	G&S: Household and Institutional Furniture and Kitchen Cabinet Manufacturing
r23-2121	0.242	1.004	P: Coal Mining	r26-3339	0.420	1.067	P: Other General Purpose Machinery Manufacturing
r24-2222	0.241	1.087	P: Gas supply pipeline to the final consumer	r5-3326	0.418	1.235	G&S: Spring and Wire Product Manufacturing
r31-5239	0.238	1.074	P: Other Financial Investment Activities	r26-3346	0.416	1.350	P: Manufacturing and Reproducing Magnetic and Optical Media
r43-H GMI LyM W D2	0.237	1.296	GI. Household: Mixed income, provide cleaning and maintenance of housing, decile 2, women	r26-3379	0.415	1.231	P: Other Furniture Related Product Manufacturing
r43-H GMI LyM W D3	0.234	1.296	GI. Household: Mixed income, provide cleaning and maintenance of housing, decile 3, women	r26-3365	0.415	1.069	P: Railroad Rolling Stock Manufacturing
r31-5232	0.232	1.107	P: Securities and Commodity Exchanges	r26-3351	0.408	1.242	P: Electric Lighting Equipment Manufacturing
r43-H GMI LyM W D1	0.229	1.296	GI. Household: Mixed income, provide cleaning and maintenance of housing, decile 1, women	r2-2121	0.404	1.188	G&S: Coal Mining
r37-6241	0.228	1.008	P: Individual and Family Services	r5-3315	0.400	1.225	G&S: Foundries
r37-6214	0.227	1.047	P: Outpatient Care Centers	r26-3117	0.392	1.036	P: Seafood Product Preparation and Packaging
r31-5225	0.226	1.013	P: Services related to credit intermediation-exchange	r22-1131	0.388	1.067	P: Timber Tract Operations
r22-1142	0.226	1.078	P: Hunting and Trapping	r41-9321	0.387	1.130	P: International and extraterritorial organizations and bodies
r41-9321	0.226	1.102	P: International and extraterritorial organizations and bodies	r31-5225	0.387	1.061	P: Services related to credit intermediation- exchange
r26-3117	0.222	1.074	P: Seafood Product Preparation and Packaging	r37-6241	0.384	1.045	P: Individual and Family Services
r10-5211	0.222	1.214	G&S: Monetary Authorities-Central Bank	r1-1151	0.381	1.132	G&S: Support Activities for Crop Production
r5-3273	0.219	1.166	G&S: Boiler, Tank, and Shipping Container Manufacturing	r5-3324	0.377	1.349	G&S: Boiler, Tank, and Shipping Container Manufacturing
r22-1151	0.215	1.025	P: Support Activities for Crop Production	r26-3325	0.374	1.174	P: Hardware Manufacturing
r5-3122	0.212	1.077	G&S: Footwear Manufacturing	r5-3162	0.374	1.224	G&S: Footwear Manufacturing

Table 13. Leading Institutional and Economic Sectors – continuation -

a) The rest of the world likes exogenous variable				b) The rest of the world likes endogenous variable			
Variable code	Standardized forward linkages	Standardized backward linkages	Name	Variable code	Standardized forward linkages	Standardized backward linkages	Name
r26-3279	0.208	1.042	P: Other Nonmetallic Mineral Product Manufacturing	r5-3149	0.373	1.201	G&S: Other Textile Product Mills
r23-2131	0.206	1.036	P: Support Activities for Mining	r4	0.367	1.088	G&S: Construction
r43-H GMI CA W D4	0.205	1.296	GI. Household: Mixed income, provide shopping and household management, decile 4, women	r5-3365	0.359	1.250	G&S: Railroad Rolling Stock Manufacturing
r43-H GMI CA W D5	0.205	1.296	GI. Household: Mixed income, provide shopping and household management, decile 5, women	r5-3362	0.358	1.286	G&S: Motor Vehicle Body and Trailer Manufacturing
r43-H GMI CyA M D4	0.201	1.296	GI. Household: Mixed income, providing care and support, decile 4, men	r5-3346	0.355	1.423	G&S: Manufacturing and Reproducing Magnetic and Optical Media
r43-H GMI LyC W D4	0.200	1.296	GI. Household: Mixed income, provide cleaning and care of clothing and shoes, decile 4, women	r26-3372	0.353	1.000	P: Office Furniture (including Fixtures) Manufacturing
r1-1114	0.200	1.033	G&S: Production: Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing	r26-3327	0.353	1.025	P: Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing
r1-1141	0.199	1.147	G&S: Alumina and Aluminum Production and Processing	r26-3313	0.350	1.155	P: Alumina and Aluminum Production and Processing
r43-H GMI LyC W D5	0.199	1.296	GI. Household: Mixed income, provide cleaning and care of clothing and shoes, decile 5, women	r26-3366	0.344	1.065	P: Ship and Boat Building
r22-1129	0.198	1.108	P: Other Animal Production	r5-3351	0.341	1.351	G&S: Electric Lighting Equipment Manufacturing
r43-H GMI CA W D3	0.196	1.296	GI. Household: Mixed income, provide shopping and household management, decile 3, women	r5-3369	0.339	1.226	G&S: Other Transportation Equipment Manufacturing
r26-3169	0.196	1.004	P: Other Leather and Allied Product Manufacturing	r5-3151	0.335	1.205	G&S: Apparel Knitting Mills
r43-H GMI CyA M D3	0.196	1.296	GI. Household: Mixed income, providing care and support, decile 3, men	r5-3321	0.329	1.274	G&S: Forging and Stamping
r43-H GMI CyA M D2	0.195	1.296	GI. Household: Mixed income, providing care and support, decile 2, men	r5-3273	0.329	1.037	G&S: Cement and Concrete Product Manufacturing
r43-H GMI LyC W D3	0.193	1.296	GI. Household: Mixed income, provide cleaning and care of clothing and shoes, decile 3, women	r5-3117	0.320	1.224	G&S: Seafood Product Preparation and Packaging
r43-H GMI LyC W D2	0.191	1.296	GI. Household: Mixed income, provide cleaning and care of clothing and shoes, decile 2, women	r26-3169	0.320	1.070	P: Other Leather and Allied Product Manufacturing
r10-5231	0.190	1.109	G&S: Brokerage, exchange and exchange centers	r5-3323	0.316	1.181	G&S: Architectural and Structural Metals Manufacturing
r43-H GMI CA M D4	0.189	1.296	GI. Household: Mixed income, provide shopping and household management, decile 4, men	r1-1122	0.316	1.278	G&S: Hog and Pig Farming
r43-H GMI CA M D5	0.187	1.296	GI. Household: Mixed income, provide shopping and household management, decile 5, men	r1-1141	0.314	1.037	G&S: Fishing

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r43-H GMI LyC W D1	0.187	1.296	GI. Household: Mixed income, provide cleaning and care of clothing and shoes, decile 1, women	r26-3133	0.313	1.131	P: Textile and Fabric Finishing and Fabric Coating Mills
r43-H GMI CyA M D5	0.187	1.296	GI. Household: Mixed income, providing care and support, decile 5, men	r19-8141	0.309	1.029	G&S: Private Households
r43-H GMI CA W D2	0.183	1.296	GI. Household: Mixed income, provide shopping and household management, decile 2, women	r5-3219	0.308	1.160	G&S: Other Wood Product Manufacturing
r43-H GMI CA M D3	0.177	1.296	GI. Household: Mixed income, provide shopping and household management, decile 3, men	r5-3335	0.300	1.244	G&S: Metalworking Machinery Manufacturing
r43-H GMI AoH W D4	0.176	1.296	GI. Household: Mixed income, provide help to other households and volunteer work, decile 4, women	r5-3141	0.294	1.164	G&S: Textile Furnishings Mills
r1-1132	0.175	1.050	G&S: Veneer, Plywood, and Engineered Wood Product Manufacturing	r26-3212	0.287	1.091	P: Veneer, Plywood, and Engineered Wood Product Manufacturing
r43-H GMI CyA M D1	0.175	1.296	GI. Household: Mixed income, providing care and support, decile 1, men	r16-6221	0.279	1.018	G&S: General Medical and Surgical Hospitals
r43-H GMI CA W D1	0.174	1.296	GI. Household: Mixed income, provide shopping and household management, decile 1, women	r5-3212	0.273	1.247	G&S: Veneer, Plywood, and Engineered Wood Product Manufacturing
r43-H w s D5	0.171	1.296	GI. Household: Wage and salaries, decile 5	r26-3369	0.270	1.021	P: Other Transportation Equipment Manufacturing
r43-H GMI AoH W D5	0.170	1.296	GI. Household: Mixed income, provide help to other households and volunteer work, decile 5,	r5-3279	0.267	1.150	G&S: Other Nonmetallic Mineral Product Manufacturing
r43-H GMI LyM M D5	0.168	1.296	GI. Household: Mixed income, provide cleaning and maintenance of housing, decile 5, men	r5-3169	0.263	1.243	G&S: Other Leather and Allied Product Manufacturing
r26-3212	0.167	1.052	P: Veneer, Plywood, and Engineered Wood Product Manufacturing	r1-1153	0.247	1.120	G&S: Support Activities for Forestry
r43-H GMI LyM M D4	0.167	1.296	GI. Household: Mixed income, provide cleaning and maintenance of housing, decile 4, men	r5-3159	0.238	1.206	G&S: Apparel Accessories and Other Apparel Manufacturing
r43-H GMI AoH W D3	0.164	1.296	GI. Household: Mixed income, provide help to other households and volunteer work, decile 3, women	r5-3379	0.232	1.399	G&S: Other Furniture Related Product Manufacturing
r43-H GMI AoH W D2	0.163	1.296	GI. Household: Mixed income, provide help to other households and volunteer work, decile 2,	r5-3274	0.228	1.174	G&S: Lime and Gypsum Product Manufacturing
r43-H GMI CA M D2	0.163	1.296	GI. Household: Mixed income, provide shopping and household management, decile 2, men	r1-1129	0.225	1.157	G&S: Other Animal Production
r1-1112	0.162	1.146	G&S: Aquaculture	r1-1125	0.215	1.074	G&S: Aquaculture
r43-H GMI LyM M D3	0.161	1.296	GI. Household: Mixed income, provide cleaning and maintenance of housing, decile 3, men	r26-3335	0.214	1.111	P: Metalworking Machinery Manufacturing
r43-H GMI A M D4	0.156	1.296	GI. Household: Mixed income, provide food, decile 4, men	r16-6223	0.210	1.050	G&S: Specialty (except Psychiatric and Substance Abuse) Hospitals
r43-H GMI A M D5	0.154	1.296	GI. Household: Mixed income, provide food, decile 5, men	r10-5239	0.209	1.046	G&S: Other Financial Investment Activities

Table 14. Leading Institutional and Economic Sectors – continuation -

a) The rest of the world likes exogenous variable				b) The rest of the world likes endogenous variable			
Variable code	Standardized forward linkages	Standardized backward linkages	Name	Variable code	Standardized forward linkages	Standardized backward linkages	Name
r43-H GMI A M D3	0.154	1.296	GL Household: Mixed income, provide food, decile 3, men	r5-3366	0.203	1.234	G&S: Ship and Boat Building
r43-H GMI CA M D1	0.153	1.296	GL Household: Mixed income, provide shopping and household management, decile 1, men	r7-4869	0.203	1.009	G&S: Other Pipeline Transportation
r43-H GMI AoH W D1	0.153	1.296	GL Household: Mixed income, provide help to other households and volunteer work, decile 1, women	r16-6244	0.202	1.113	G&S: Child Day Care Services
r43-H GMI LyM M D2	0.153	1.296	GL Household: Mixed income, provide cleaning and maintenance of housing, decile 2, men	r5-3372	0.201	1.172	G&S: Office Furniture (including Fixtures) Manufacturing
r43-H w s D4	0.152	1.296	GL Household: Wage and salaries, decile 4	r10-5232	0.200	1.023	G&S: Securities and Commodity Exchanges
r7-4862	0.151	1.134	G&S: Support Activities for Mining	r2-2131	0.198	1.096	G&S: Support Activities for Mining
r1-1124	0.150	1.171	G&S: Administrative activities of social welfare institutions	r20-9316	0.198	1.032	G&S: Administrative activities of social welfare institutions
r43-H GMI LyM M D1	0.146	1.296	GL Household: Mixed income, provide cleaning and maintenance of housing, decile 1, men	r10-5225	0.198	1.229	G&S: Services related to credit intermediation- exchange
r1-1153	0.145	1.117	G&S: Timber Tract Operations	r1-1131	0.197	1.245	G&S: Timber Tract Operations
r43-H GMI A M D2	0.144	1.296	GL Household: Mixed income, provide food, decile 2, men	r16-6214	0.196	1.073	G&S: Outpatient Care Centers
r1-1125	0.144	1.084	G&S: Individual and Family Services	r16-6241	0.196	1.207	G&S: Individual and Family Services
r43-NPIsSH w s	0.142	1.296	GL NPIsSH: Wage and salaries	r16-6239	0.196	1.001	G&S: Other Residential Care Facilities
r43-H GMI A M D1	0.139	1.296	GL Household: Mixed income, provide food, decile 1, men	r16-6233	0.195	1.049	G&S: Continuing Care Retirement Communities and Assisted Living Facilities for the Elderly
r5-3274	0.138	1.112	G&S: Home Health Care Services	r16-6216	0.195	1.018	G&S: Home Health Care Services
r16-6244	0.136	1.072	G&S: Regulating and promoting economic development	r20-9313	0.195	1.076	G&S: Regulating and promoting economic development
r43-F CExnonpension	0.136	1.296	GL Financial companies: effective employer contribution for nonpension	r20-9321	0.194	1.321	G&S: International and extraterritorial organizations and bodies
r43-H GMI AoH M D4	0.135	1.296	GL Household: Mixed income, provide help to other households and volunteer work, decile 4, men	r44-NFIRW	0.194	1.296	PAI: Net Factorial Incomes of the Rest of the World
r43-H GMI AoH M D5	0.135	1.296	GL Household: Mixed income, provide help to other households and volunteer work, decile 5, men	r20-9317	0.194	1.116	G&S: Foreign affairs
r43-H w s D10	0.133	1.296	GL Household: Wage and salaries, decile 10	r20-9318	0.194	1.115	G&S: National security activities
r7-4869	0.133	1.063	G&S: Other Pipeline Transportation	r20-9312	0.194	1.069	G&S: General public administration
r10-5239	0.132	1.126	G&S: Securities and Commodity Exchanges	r20-9314	0.194	1.069	G&S: Law enforcement and maintenance of security and public order
r26-3333	0.131	1.030	P: Commercial and Service Industry Machinery Manufacturing	r20-9311	0.194	1.044	G&S: Legislatures
r43-H GMI LyC M D4	0.131	1.296	GL Household: Mixed income, provide cleaning and care of clothing and shoes, decile 4, men	r20-9315	0.194	1.020	G&S: Regulation and promotion of activities to improve and preserve the environment
r3-2222	0.130	1.183	G&S: Gas supply pipeline to the final consumer				
r43-H GMI LyC M D5	0.129	1.296	GL Household: Mixed income, provide cleaning and care of clothing and shoes, decile 5, men				

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r43-H GMI AoH M D2	0.129	1.296	GI. Household: Mixed income, provide help to other households and volunteer work, decile 2, men				
r43-H GMI LyC M D3	0.129	1.296	GI. Household: Mixed income, provide cleaning and care of clothing and shoes, decile 3, men				
r43-H GMI AoH M D3	0.127	1.296	GI. Household: Mixed income, provide help to other households and volunteer work, decile 3, men				
r43-H GMI LyC M D2	0.126	1.296	GI. Household: Mixed income, provide cleaning and care of clothing and shoes, decile 2, men				
r43-F CIXnonpension	0.126	1.296	GI. Financial companies: imputed contribution by employers for nonpension				
r43-H w s D9	0.126	1.296	GI. Household: Wage and salaries, decile 9				
r43-H GMI AoH M D1	0.123	1.296	GI. Household: Mixed income, provide help to other households and volunteer work, decile 1, men				
r43-H GMI LyC M D1	0.123	1.296	GI. Household: Mixed income, provide cleaning and care of clothing and shoes, decile 1, men				
r10-5232	0.120	1.215	G&S: Securities and Commodity Exchanges				
r20-9317	0.120	1.050	G&S: Foreign affairs				
r16-6241	0.119	1.090	G&S: Individual and Family Services				
r16-6214	0.119	1.118	G&S: Outpatient Care Centers				
r16-6239	0.118	1.022	G&S: Other Residential Care Facilities				
r1-1152	0.118	1.065	G&S: Support Activities for Animal Production				
r10-5225	0.116	1.102	G&S: Services related to credit intermediation-exchange				
r1-1131	0.115	1.039	G&S: Timber Tract Operations				
r43-H w s D7	0.115	1.296	GI. Household: Wage and salaries, decile 7				
r1-1142	0.115	1.171	G&S: Hunting and Trapping				
r20-9318	0.114	1.008	G&S: National security activities				
r16-6243	0.114	1.054	G&S: Vocational Rehabilitation Services				
r20-9321	0.113	1.213	G&S: International and extraterritorial organizations and bodies				
r2-2131	0.091	1.143	G&S: Support Activities for Mining				
r43-NPIsSH gos	0.081	1.171	GI: NPIsSH: gross operating surplus				
r43-F cfcgos	0.068	1.111	GI: Financial companies: Consumption of fixed capital on gross operating surplus				
r43-H cfcgos	-3.040	1.296	GI. Household: Consumption of fixed capital on gross operating surplus				
r43-NF cfcgos	-3.625	1.083	GI. Non-financial companies: Consumption of fixed capital on gross operating surplus				

Table 15. Independent Institutional and Economic Sectors

a) The rest of the world likes exogenous variable				b) The rest of the world likes endogenous variable			
Variable code	Standardized forward linkages	Standardized backward linkages	Name	Variable code	Standardized forward linkages	Standardized backward linkages	Name
r26-3112	0.9462	0.9710	P: Grain and Oilseed Milling	r34	1.000	0.657	P: Management of Companies and Enterprises
r36	0.8797	0.8798	P: Educational Services	r22-1119	0.955	0.822	P: Other Crop Farming
r26-3261	0.8688	0.8764	P: Plastics Product Manufacturing	r22-1121	0.917	0.967	P: Cattle Ranching and Farming
r10-5241	0.8463	0.8682	G&S: Insurance Carriers	r26-3119	0.889	0.955	P: Other Food Manufacturing
r15	0.7984	0.9764	G&S: Educational Services	r44-NPIsSH	0.842	0.216	PAI: Net Factorial Incomes of the Rest of the World
r5-3222	0.7859	0.7502	G&S: Converted Paper Product Manufacturing	r13	0.840	0.824	G&S: Management of Companies and Enterprises
r26-3111	0.7808	0.9937	P: Animal Food Manufacturing	r22-1112	0.790	0.728	P: Vegetable and Melon Farming
r26-3344	0.7737	0.6694	P: Semiconductor and Other Electronic Component Manufacturing	r22-1113	0.784	0.771	P: Fruit and Tree Nut Farming
r5-3221	0.7654	0.7175	G&S: Pulp, Paper, and Paperboard Mills	r43-F w s	0.731	0.994	GI: Financial companies, Wage and salaries
r46-NF	0.7560	0.8464	UI: Non-financial companies	r23-2123	0.700	0.733	P: Nonmetallic Mineral Mining and Quarrying
r26-3312	0.7346	0.9987	P: Steel Product Manufacturing from Purchased Steel	r22-1133	0.688	0.736	P: Logging
r5-3312	0.7110	0.9168	G&S: Steel Product Manufacturing from Purchased Steel	r26-3272	0.686	0.978	P: Glass and Glass Product Manufacturing
r5-3311	0.7105	0.8158	G&S: Iron and Steel Mills and Ferroalloy Manufacturing	r43-NPIsSH	0.669	0.994	GI: Non-profit institutions serving household, Wage and salaries
r5-3399	0.6866	0.6107	G&S: Other Miscellaneous Manufacturing	r1-1113	0.668	0.983	G&S: Fruit and Tree Nut Farming
r26-3222	0.6352	0.9614	P: Converted Paper Product Manufacturing	r24-2221	0.667	0.828	P: Water collection, treatment and supply of water
r26-3152	0.5775	0.9237	P: Cut and Sew Apparel Manufacturing	r26-3211	0.661	0.947	P: Sawmills and Wood Preservation
r5-3256	0.5742	0.9578	G&S: Soap, Cleaning Compound, and Toilet Preparation Manufacturing	r36	0.653	0.801	P: Educational Services
r43-G is	0.5735	0.1132	GI: Government: Import subsidies	r26-3114	0.640	0.911	P: Fruit and Vegetable Preserving and Specialty Food Manufacturing
r26-3221	0.5664	0.9958	P: Pulp, Paper, and Paperboard Mills	r26-3334	0.637	0.992	P: Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing
r26-3252	0.5662	0.9389	P: Resin, Synthetic Rubber, and Artificial Synthetic Fibers and Filaments Manufacturing	r1-1112	0.633	0.923	G&S: Vegetable and Melon Farming
r5-3152	0.5429	0.8746	G&S: Cut and Sew Apparel Manufacturing	r2-2123	0.619	0.940	G&S: Nonmetallic Mineral Mining and Quarrying
r24-2221	0.5378	0.9149	P: Water collection, treatment and supply of water	r29	0.596	0.909	P: Postal Service and Warehousing
r5-3253	0.5325	0.7175	G&S: Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing	r43-NF	0.582	0.994	GI: Non-financial companies: imputed contribution by employers for nonpension
r3-2221	0.5300	0.9522	G&S: Water collection, treatment and supply of water	r43-NF	0.577	0.994	Generation of income. Non-financial companies: effective employer contribution for nonpension
r5-3329	0.5266	0.4775	G&S: Other Fabricated Metal Product Manufacturing	r31-5224	0.559	0.820	P: Securities and Commodity Contracts Intermediation and Brokerage
r40-8141	0.5260	0.9005	P: Private Households	r26-3271	0.556	0.849	P: Clay Product and Refractory Manufacturing
r37-RESTO 621	0.5099	0.9156	P: THE REST OF THE SUB-SECTOR 621: Ambulatory Health Care Services	r31-5242	0.553	0.688	P: Agencies, Brokerages, and Other Insurance Related Activities
r5-3132	0.5005	0.6015	G&S: Fabric Mills	r25	0.553	0.916	P: Construction
r43-H cfcgmi	0.4981	1.2957	GI: Household: Consumption of fixed capital on gross mixed income	r43-H w s D8	0.548	0.994	GI: Household: Wage and salaries, decile 8

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r5-3259	0.4804	0.4920	G&S: Other Chemical Product and Preparation Manufacturing	r31-5222	0.542	0.667	P: Nondepository Credit Intermediation
r5-3391	0.4800	0.6897	G&S: Medical Equipment and Supplies Manufacturing	r38	0.538	0.738	P: Arts, Entertainment, and Recreation
r2-2122	0.4763	0.9952	G&S: Metal Ore Mining	r43-H GMI CyA W D3	0.535	0.994	GI. Household: Mixed income, providing care and support, decile 3, women
r26-3399	0.4742	0.9063	P: Other Miscellaneous Manufacturing	r43-H GMI CyA W D3	0.526	0.994	GI. Household: Mixed income, providing care and support, decile 2, women
r43-G es	0.4648	0.1132	GI. Government: Export subsidies	r26-3371	0.520	0.970	P: Household and Institutional Furniture and Kitchen Cabinet Manufacturing
r5-3359	0.4627	0.4800	G&S: Other Electrical Equipment and Component Manufacturing	r3-2221	0.516	0.953	G&S: Water collection, treatment and supply of water
r5-3313	0.4584	0.2511	G&S: Alumina and Aluminum Production and Processing	r37-RESTO 621	0.513	0.785	P: THE REST OF THE SUB-SECTOR 621: Ambulatory Health Care Services
r26-3231	0.4504	0.9614	P: Printing and Related Support Activities	r26-3122	0.510	0.745	P: Tobacco Manufacturing
r5-3231	0.4395	0.8507	G&S: Printing and Related Support Activities	r26-3273	0.510	0.869	P: Cement and Concrete Product Manufacturing
r26-3391	0.4381	0.7763	P: Medical Equipment and Supplies Manufacturing	r1-1133	0.508	0.918	G&S: Logging
r5-3336	0.4242	0.5023	G&S: Engine, Turbine, and Power Transmission Equipment Manufacturing	r40-8141	0.503	0.835	P: Private Households
r26-3352	0.4185	0.8631	P: Household Appliance Manufacturing	r31-5211	0.502	0.623	P: Monetary Authorities-Central Bank
r37-6221	0.3972	0.8242	P: General Medical and Surgical Hospitals	r22-1141	0.494	0.877	P: Fishing
r5-3328	0.3933	0.7394	G&S: Coating, Engraving, Heat Treating, and Allied Activities	r43-H GMI CyA W D4	0.492	0.994	GI. Household: Mixed income, providing care and support, decile 4, women
r5-3352	0.3916	0.8440	G&S: Household Appliance Manufacturing	r15	0.468	0.980	G&S: Educational Services
r5-3262	0.3891	0.5043	G&S: Rubber Product Manufacturing	r37-6221	0.468	0.841	P: General Medical and Surgical Hospitals
r26-3132	0.3853	0.8943	P: Fabric Mills	r43-H GMI CyA W D1	0.467	0.994	GI. Household: Mixed income, providing care and support, decile 1, women
r26-3162	0.3675	0.9492	P: Footwear Manufacturing	r43-H GMI A W D5	0.460	0.994	GI. Household: Mixed income, provide food, decile 5, women
r26-3255	0.3648	0.9496	P: Paint, Coating, and Adhesive Manufacturing	r22-1114	0.457	0.784	P: Greenhouse, Nursery, and Floriculture Production
r5-3255	0.3514	0.8082	G&S: Paint, Coating, and Adhesive Manufacturing	r43-NPIsSH gos	0.454	0.410	GI. NPIsSH: gross operating surplus
r2-2123	0.3471	0.9841	G&S: Nonmetallic Mineral Mining and Quarrying	r43-H GMI CyA W D5	0.451	0.994	GI. Household: Mixed income, providing care and support, decile 5, women

Table 16. Independent Institutional and Economic Sectors – continuation –

a) The rest of the world likes exogenous variable				b) The rest of the world likes endogenous variable			
Variable code	Standardized forward linkages	Standardized backward linkages	Name	Variable code	Standardized forward linkages	Standardized backward linkages	Name
r26-3329	0.3312	0.8987	P: Other Fabricated Metal Product Manufacturing	r26-3219	0.447	0.975	P: Other Wood Product Manufacturing
r5-3162	0.3288	0.8466	G&S: Footwear Manufacturing	r22-1132	0.445	0.576	P: Forest Nurseries and Gathering of Forest Products
r5-3272	0.3279	0.9065	G&S: Glass and Glass Product Manufacturing	r43-H GMI A W D4	0.442	0.994	GI. Household: Mixed income, provide food, decile 4, women
r16-6221	0.3241	0.9214	G&S: General Medical and Surgical Hospitals	r22-1153	0.436	0.941	P: Support Activities for Forestry
r26-3359	0.3200	0.9172	P: Other Electrical Equipment and Component Manufacturing	r31-5231	0.433	0.793	P: Brokerage, exchange and exchange centers
r5-3314	0.3132	0.8981	G&S: Nonferrous Metal (except Aluminum) Production and Processing	r22-1124	0.424	0.727	P: Sheep and Goat Farming
r5-3361	0.3126	0.8662	G&S: Motor Vehicle Manufacturing	r43-H GMI A W D3	0.423	0.994	GI. Household: Mixed income, provide food, decile 3, women
r26-3324	0.3024	0.9023	P: Boiler, Tank, and Shipping Container Manufacturing	r43-H GMI A W D2	0.420	0.994	GI. Household: Mixed income, provide food, decile 2, women
r26-3259	0.3008	0.9546	P: Other Chemical Product and Preparation Manufacturing	r26-3274	0.410	0.993	P: Lime and Gypsum Product Manufacturing
r26-3131	0.2908	0.9829	P: Fiber, Yarn, and Thread Mills	r43-H GMI A W D1	0.406	0.994	GI. Household: Mixed income, provide food, decile 1, women
r5-3131	0.2876	0.7157	G&S: Fiber, Yarn, and Thread Mills	r43-H w s D6	0.401	0.994	GI. Household: Wage and salaries, decile 6
r5-3341	0.2823	0.3878	G&S: Computer and Peripheral Equipment Manufacturing	r37-6223	0.398	0.882	P: Specialty (except Psychiatric and Substance Abuse) Hospitals
r5-3133	0.2822	0.3293	G&S: Textile and Fabric Finishing and Fabric Coating Mills	r26-3141	0.396	0.954	P: Textile Furnishings Mills
r31-5223	0.2762	0.8303	P: Activities Related to Credit Intermediation	r24-2222	0.395	0.808	P: Gas supply pipeline to the final consumer
r5-3327	0.2686	0.4483	G&S: Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing	r23-2121	0.395	0.955	P: Coal Mining
r26-3262	0.2664	0.8992	P: Rubber Product Manufacturing	r31-5232	0.393	0.833	P: Securities and Commodity Exchanges
r26-3379	0.2624	0.8763	P: Other Furniture Related Product Manufacturing	r28-4862	0.391	0.834	P: Pipeline Transportation of Natural Gas
r37-6223	0.2617	0.8348	P: Specialty (except Psychiatric and Substance Abuse) Hospitals	r23-2131	0.391	0.907	P: Support Activities for Mining
r41-9312	0.2616	0.9144	P: General public administration	r31-5239	0.390	0.904	P: Other Financial Investment Activities
r26-3149	0.2605	0.9378	P: Other Textile Product Mills	r37-6244	0.390	0.950	P: Child Day Care Services
r26-3151	0.2595	0.9192	P: Apparel Knitting Mills	r35-5621	0.390	0.811	P: Waste Collection
r2-2121	0.2581	0.6121	G&S: Coal Mining	r41-9318	0.387	0.923	P: National security activities
r5-3322	0.2568	0.6127	G&S: Cutlery and Handtool Manufacturing	r28-4869	0.387	0.856	P: Other Pipeline Transportation
r5-3161	0.2566	0.7307	G&S: Leather and Hide Tanning and Finishing	r41-9316	0.387	0.860	P: Administrative activities of social welfare institutions
r26-3323	0.2545	0.9923	P: Architectural and Structural Metals Manufacturing	r22-1152	0.386	0.798	P: Support Activities for Animal Production
r26-3346	0.2544	0.7408	P: Manufacturing and Reproducing Magnetic and Optical Media	r22-1125	0.385	0.930	P: Aquaculture

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r5-3371	0.2542	0.9004	G&S: Household and Institutional Furniture and Kitchen Cabinet Manufacturing	r22-1142	0.385	0.810	P: Hunting and Trapping
r26-3315	0.2501	0.9769	P: Foundries	r41-9311	0.383	0.872	P: Legislatures
r35-5621	0.2474	0.9631	P: Waste Collection	r37-6214	0.382	0.917	P: Outpatient Care Centers
r37-6244	0.2469	0.9902	P: Child Day Care Services	r41-9314	0.381	0.907	P: Law enforcement and maintenance of security and public order
r26-3141	0.2458	0.9905	P: Textile Furnishings Mills	r41-9317	0.380	0.960	P: Foreign affairs
r26-3336	0.2453	0.8737	P: Engine, Turbine, and Power Transmission Equipment Manufacturing	r10-5242	0.380	0.845	G&S: Agencies, Brokerages, and Other Insurance Related Activities
r26-3322	0.2446	0.9871	P: Cutlery and Handtool Manufacturing	r10-5224	0.380	0.981	G&S: Securities and Commodity Contracts Intermediation and Brokerage
r41-9313	0.2445	0.9331	P: Regulating and promoting economic development	r41-9312	0.379	0.917	P: General public administration
r28-4869	0.2398	0.9976	P: Other Pipeline Transportation	r10-5222	0.379	0.807	G&S: Nondepository Credit Intermediation
r26-3342	0.2391	0.6248	P: Communications Equipment Manufacturing	r41-9313	0.378	0.932	P: Regulating and promoting economic development
r1-1151	0.2387	0.5702	G&S: Support Activities for Crop Production	r37-6243	0.377	0.773	P: Vocational Rehabilitation Services
r26-3343	0.2362	0.5884	P: Audio and Video Equipment Manufacturing	r41-9315	0.376	0.880	P: Regulation and promotion of activities to improve and preserve the environment
r26-3341	0.2353	0.6877	P: Computer and Peripheral Equipment Manufacturing	r37-6222	0.373	0.851	P: Psychiatric and Substance Abuse Hospitals
r5-3324	0.2328	0.8711	G&S: Boiler, Tank, and Shipping Container Manufacturing	r37-6216	0.372	0.900	P: Home Health Care Services
r41-9316	0.2324	0.8446	P: Administrative activities of social welfare institutions	r37-6239	0.372	0.886	P: Other Residential Care Facilities
r10-5223	0.2323	0.7366	G&S: Activities Related to Credit Intermediation	r37-6242	0.372	0.833	P: Community Food and Housing, and Emergency and Other Relief Services
r5-3346	0.2290	0.5761	G&S: Manufacturing and Reproducing Magnetic and Optical Media	r31-5223	0.371	0.809	P: Activities Related to Credit Intermediation
r26-3321	0.2288	0.9625	P: Forging and Stamping	r37-6231	0.371	0.880	P: Nursing Care Facilities (Skilled Nursing Facilities)
r41-9317	0.2285	0.9760	P: Foreign affairs	r37-6232	0.370	0.786	P: Residential Intellectual and Developmental Disability, Mental Health, and Substance Abuse Facilities
r22-1131	0.2268	0.9397	P: Timber Tract Operations	r37-6233	0.370	0.946	P: Continuing Care Retirement Communities and Assisted Living Facilities for the Elderly
r22-1152	0.2259	0.9987	P: Support Activities for Animal Production	r22-1151	0.364	0.810	P: Support Activities for Crop Production
r5-3342	0.2251	0.3861	G&S: Communications Equipment Manufacturing	r5-3122	0.361	0.964	G&S: Tobacco Manufacturing
r5-3326	0.2250	0.7854	G&S: Spring and Wire Product Manufacturing	r17	0.359	0.902	G&S: Arts, Entertainment, and Recreation
r41-9315	0.2219	0.8974	P: Regulation and promotion of activities to improve and preserve the environment	r26-3279	0.358	0.935	P: Other Nonmetallic Mineral Product Manufacturing

Table 17. Independent Institutional and Economic Sectors – continuation –

a) The rest of the world likes exogenous variable				b) The rest of the world likes endogenous variable			
Variable code	Standardized forward linkages	Standardized backward linkages	Name	Variable code	Standardized forward linkages	Standardized backward linkages	Name
r26-3351	0.2218	0.8404	P: Electric Lighting Equipment Manufacturing	r43-H w s D3	0.358	0.994	GI. Household: Wage and salaries, decile 3
r37-6239	0.2212	0.9983	P: Other Residential Care Facilities	r43-H GMI LyM W D5	0.345	0.994	GI. Household: Mixed income, provide cleaning and maintenance of housing, decile 5, women
r37-6243	0.2205	0.9958	P: Vocational Rehabilitation Services	r43-H GMI LyM W D4	0.343	0.994	GI. Household: Mixed income, provide cleaning and maintenance of housing, decile 4, women
r41-9311	0.2205	0.8837	P: Legislatures	r22-1129	0.337	0.929	P: Other Animal Production
r37-6216	0.2184	0.8242	P: Home Health Care Services	r43-H GMI LyM W D2	0.330	0.994	GI. Household: Mixed income, provide cleaning and maintenance of housing, decile 2, women
r37-6242	0.2184	0.9548	P: Community Food and Housing, and Emergency and Other Relief Services	r43-H GMI LyM W D3	0.328	0.994	GI. Household: Mixed income, provide cleaning and maintenance of housing, decile 3, women
r37-6222	0.2183	0.9157	P: Psychiatric and Substance Abuse Hospitals	r16-RESTO 621	0.325	0.965	G&S: THE REST OF THE SUB-SECTOR 621: Ambulatory Health Care Services
r37-6233	0.2178	0.9362	P: Continuing Care Retirement Communities and Assisted Living Facilities for the Elderly	r43-H GMI LyM W D1	0.322	0.994	GI. Household: Mixed income, provide cleaning and maintenance of housing, decile 1, women
r37-6232	0.2169	0.7870	P: Residential Intellectual and Developmental Disability, Mental Health, and Substance Abuse Facilities	r46-NPIsSH	0.321	-0.139	UI: NPIsSH
r37-6231	0.2169	0.9295	P: Nursing Care Facilities (Skilled Nursing Facilities)	r10-5211	0.315	0.803	G&S: Monetary Authorities-Central Bank
r5-3149	0.2161	0.7516	G&S: Other Textile Product Mills	r26-3159	0.314	0.989	P: Apparel Accessories and Other Apparel Manufacturing
r5-3151	0.2127	0.7345	G&S: Apparel Knitting Mills	r43-H GMI CA W D4	0.295	0.994	GI. Household: Mixed income, provide shopping and household management, decile 4, women
r26-3361	0.2063	0.9112	P: Motor Vehicle Manufacturing	r1-1114	0.295	0.996	G&S: Greenhouse, Nursery, and Floriculture Production
r26-3353	0.2049	0.8697	P: Electrical Equipment Manufacturing	r43-H GMI CA W D5	0.295	0.994	GI. Household: Mixed income, provide shopping and household management, decile 5, women
r41-9318	0.2046	0.8962	P: National security activities	r43-H GMI LyM W D4	0.291	0.994	GI. Household: Mixed income, providing care and support, decile 4, men
r26-3327	0.2045	0.9792	P: Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing	r43-H GMI LyC W D4	0.290	0.994	GI. Household: Mixed income, provide cleaning and care of clothing and shoes, decile 4, women
r26-3366	0.1984	0.9042	P: Ship and Boat Building	r43-H GMI LyM W D5	0.289	0.994	GI. Household: Mixed income, provide cleaning and care of clothing and shoes, decile 5, women
r26-3313	0.1976	0.7627	P: Alumina and Aluminum Production and Processing	r43-H GMI CA W D3	0.285	0.994	GI. Household: Mixed income, provide shopping and household management, decile 3, women
r26-3325	0.1941	0.8197	P: Hardware Manufacturing	r43-H GMI CyA M D3	0.285	0.994	GI. Household: Mixed income, providing care and support, decile 3, men
r26-3372	0.1920	0.9983	P: Office Furniture (including Fixtures) Manufacturing	r43-H GMI CyA M D2	0.285	0.994	GI. Household: Mixed income, providing care and support, decile 2, men
r26-3364	0.1886	0.8480	P: Aerospace Product and Parts Manufacturing	r1-1132	0.284	0.813	G&S: Forest Nurseries and Gathering of Forest Products

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r26-3159	0.1881	0.9530	P: Apparel Accessories and Other Apparel Manufacturing	r43-RW	0.284	0.994	GI. RW: Wage and salaries
r26-3362	0.1871	0.9380	P: Motor Vehicle Body and Trailer Manufacturing	r43-H GMI LyC W D3	0.282	0.994	GI. Household: Mixed income, provide cleaning and care of clothing and shoes, decile 3, women
r23-2122	0.1871	0.9499	P: Metal Ore Mining	r43-H GMI LyC W D2	0.280	0.994	GI. Household: Mixed income, provide cleaning and care of clothing and shoes, decile 2, women
r5-3325	0.1869	0.4342	G&S: Hardware Manufacturing	r43-H GMI CA M D4	0.277	0.994	GI. Household: Mixed income, provide shopping and household management, decile 4, men
r26-3133	0.1842	0.8448	P: Textile and Fabric Finishing and Fabric Coating Mills	r43-H GMI CA M D5	0.276	0.994	GI. Household: Mixed income, provide shopping and household management, decile 5, men
r41-9314	0.1836	0.8866	P: Law enforcement and maintenance of security and public order	r43-H GMI LyC W D1	0.275	0.994	GI. Household: Mixed income, provide cleaning and care of clothing and shoes, decile 1, women
r5-3315	0.1808	0.8194	G&S: Foundries	r43-H GMI CyA M D5	0.275	0.994	GI. Household: Mixed income, providing care and support, decile 5, men
r5-3364	0.1806	0.5144	G&S: Aerospace Product and Parts Manufacturing	r43-H GMI CA W D2	0.271	0.994	GI. Household: Mixed income, provide shopping and household management, decile 2, women
r5-3141	0.1804	0.7954	G&S: Textile Furnishings Mills	r43-H GMI CA M D3	0.264	0.994	GI. Household: Mixed income, provide shopping and household management, decile 3, men
r5-3117	0.1772	0.7796	G&S: Seafood Product Preparation and Packaging	r26-3332	0.263	0.943	P: Industrial Machinery Manufacturing
r5-3351	0.1737	0.6407	G&S: Electric Lighting Equipment Manufacturing	r43-H GMI AoH W D4	0.263	0.994	GI. Household: Mixed income, provide help to other households and volunteer work, decile 4, women
r5-3219	0.1735	0.9933	G&S: Other Wood Product Manufacturing	r43-H GMI CyA M D1	0.262	0.994	GI. Household: Mixed income, providing care and support, decile 1, men
r26-3331	0.1725	0.8954	P: Agriculture, Construction, and Mining Machinery Manufacturing	r43-H GMI CA W D1	0.261	0.994	GI. Household: Mixed income, provide shopping and household management, decile 1, women
r5-3169	0.1704	0.5930	G&S: Other Leather and Allied Product Manufacturing	r43-H w s D5	0.261	0.994	GI. Household: Wage and salaries, decile 5
r16-6223	0.1693	0.9240	G&S: Specialty (except Psychiatric and Substance Abuse) Hospitals	r43-H GMI AoH W D5	0.257	0.994	GI. Household: Mixed income, provide help to other households and volunteer work, decile 5, women
r26-3365	0.1653	0.9943	P: Railroad Rolling Stock Manufacturing	r43-H GMI LyM M D5	0.254	0.994	GI. Household: Mixed income, provide cleaning and maintenance of housing, decile 5, men
r5-3353	0.1628	0.5104	G&S: Electrical Equipment Manufacturing	r43-H GMI LyM M D4	0.253	0.994	GI. Household: Mixed income, provide cleaning and maintenance of housing, decile 4, men
r5-3321	0.1624	0.7809	G&S: Forging and Stamping	r10-5231	0.251	0.950	G&S. Brokerage, exchange and exchange centers
r5-3379	0.1599	0.9477	G&S: Other Furniture Related Product Manufacturing	r43-H GMI AoH W D3	0.250	0.994	GI. Household: Mixed income, provide help to other households and volunteer work, decile 3, women

Table 18. Independent Institutional and Economic Sectors – continuation –

a) The rest of the world likes exogenous variable				b) The rest of the world likes endogenous variable			
Variable code	Standardized forward linkages	Standardized backward linkages	Name	Variable code	Standardized forward linkages	Standardized backward linkages	Name
r5-3369	0.1573	0.3067	G&S: Other Transportation Equipment Manufacturing	r43-H GMI AoH W D2	0.249	0.994	GI. Household: Mixed income, provide help to other households and volunteer work, decile 2, women
r5-3212	0.1566	0.4723	G&S: Veneer, Plywood, and Engineered Wood Product Manufacturing	r43-H GMI CA M D2	0.248	0.994	GI. Household: Mixed income, provide shopping and household management, decile 2, men
r5-3333	0.1552	0.1715	G&S: Commercial and Service Industry Machinery Manufacturing	r43-H GMI LyM M D3	0.246	0.994	GI. Household: Mixed income, provide cleaning and maintenance of housing, decile 3, men
r20-9316	0.1543	0.9358	G&S: Administrative activities of social welfare institutions	r43-H GMI A M D4	0.241	0.994	GI. Household: Mixed income, provide food, decile 4, men
r14-5621	0.1529	0.9477	G&S: Waste Collection	r43-H GMI A M D5	0.239	0.994	GI. Household: Mixed income, provide food, decile 5, men
r26-3369	0.1509	0.8570	P: Other Transportation Equipment Manufacturing	r43-H w s D4	0.239	0.994	GI. Household: Wage and salaries, decile 4
r5-3323	0.1507	0.9242	G&S: Architectural and Structural Metals Manufacturing	r43-H GMI A M D3	0.238	0.994	GI. Household: Mixed income, provide food, decile 3, men
r26-3345	0.1499	0.8369	P: Navigational, Measuring, Electromedical, and Control Instruments Manufacturing	r43-H GMI CA M D1	0.238	0.994	GI. Household: Mixed income, provide shopping and household management, decile 1, men
r5-3279	0.1488	0.7529	G&S: Other Nonmetallic Mineral Product Manufacturing	r43-H GMI AoH W D1	0.238	0.994	GI. Household: Mixed income, provide help to other households and volunteer work, decile 1, women
r5-3159	0.1479	0.5956	G&S: Apparel Accessories and Other Apparel Manufacturing	r43-H GMI LyM M D2	0.238	0.994	GI. Household: Mixed income, provide cleaning and maintenance of housing, decile 2, men
r20-9312	0.1467	0.9864	G&S: General public administration	r1-1124	0.238	0.916	G&S. Sheep and Goat Farming
r20-9314	0.1397	0.9690	G&S: Law enforcement and maintenance of security and public order	r10-5223	0.236	0.801	G&S. Activities Related to Credit Intermediation
r26-3339	0.1391	0.9115	P: Other General Purpose Machinery Manufacturing	r26-3333	0.232	0.871	P. Commercial and Service Industry Machinery Manufacturing
r5-3343	0.1388	0.4534	G&S: Audio and Video Equipment Manufacturing	r43-H GMI LyM M D1	0.230	0.994	GI. Household: Mixed income, provide cleaning and maintenance of housing, decile 1, men
r5-3331	0.1374	0.6024	G&S: Agriculture, Construction, and Mining Machinery Manufacturing	r43-H GMI A M D2	0.228	0.994	GI. Household: Mixed income, provide food, decile 2, men
r26-3332	0.1365	0.9616	G&S: Industrial Machinery Manufacturing	r43-G gos	0.227	0.194	GI. Government: Gross operating surplus
r1-1129	0.1320	0.8202	G&S: Other Animal Production	r14-5621	0.226	0.896	G&S. Waste Collection
r20-9313	0.1306	0.9961	G&S: Regulating and promoting economic development	r43- F CExnonpension	0.223	0.994	GI. Financial companies: effective employer contribution for nonpension
r20-9311	0.1191	0.9755	G&S: Legislatures	r43-H GMI A M D1	0.222	0.994	GI. Household: Mixed income, provide food, decile 1, men

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r26-3335	0.1159	0.8735	P: Metalworking Machinery Manufacturing	r43-H GMI AoH M D4	0.218	0.994	GI. Household: Mixed income, provide help to other households and volunteer work, decile 4, men
r16-6233	0.1158	0.9588	G&S: Continuing Care Retirement Communities and Assisted Living Facilities for the Elderly	r43-H GMI AoH M D5	0.217	0.994	GI. Household: Mixed income, provide help to other households and volunteer work, decile 5, men
r5-3366	0.1156	0.7819	G&S: Ship and Boat Building	r43-H w s D10	0.217	0.994	GI. Household: Wage and salaries, decile 10
r20-9315	0.1152	0.9564	G&S: Regulation and promotion of activities to improve and preserve the environment	r43-H GMI LyC M D4	0.213	0.994	GI. Household: Mixed income, provide cleaning and care of clothing and shoes, decile 4, men
r16-6216	0.1150	0.8680	G&S: Home Health Care Services	r43-F CIXnonpension	0.212	0.994	GI. Financial companies: imputed contribution by employers for nonpension
r16-6242	0.1149	0.9862	G&S: Community Food and Housing, and Emergency and Other Relief Services	r43-H GMI LyC M D5	0.211	0.994	GI. Household: Mixed income, provide cleaning and care of clothing and shoes, decile 5, men
r16-6222	0.1140	0.9569	G&S: Psychiatric and Substance Abuse Hospitals	r43-H GMI AoH M D2	0.211	0.994	GI. Household: Mixed income, provide help to other households and volunteer work, decile 2, men
r16-6232	0.1138	0.8282	G&S: Residential Intellectual and Developmental Disability, Mental Health, and Substance Abuse Facilities	r43-H GMI LyC M D3	0.211	0.994	GI. Household: Mixed income, provide cleaning and care of clothing and shoes, decile 3, men
r16-6231	0.1136	0.9613	G&S: Nursing Care Facilities (Skilled Nursing Facilities)	r43-H GMI AoH M D3	0.209	0.994	GI. Household: Mixed income, provide help to other households and volunteer work, decile 3, men
r5-3332	0.1126	0.2263	G&S: Industrial Machinery Manufacturing	r43-H w s D9	0.208	0.994	GI. Household: Wage and salaries, decile 9
r5-3362	0.0972	0.7869	G&S: Motor Vehicle Body and Trailer Manufacturing	r7-4862	0.208	0.986	G&S. Pipeline Transportation of Natural Gas
r5-3339	0.0949	0.3506	G&S: Other General Purpose Machinery Manufacturing	r43-H GMI LyC M D2	0.208	0.994	GI. Household: Mixed income, provide cleaning and care of clothing and shoes, decile 2, men
r43-G cfcgos	0.0923	0.1132	GI. Government: Consumption of fixed capital on gross operating surplus	r43-H GMI AoH M D1	0.205	0.994	GI. Household: Mixed income, provide help to other households and volunteer work, decile 1, men
r5-3372	0.0920	0.9057	G&S: Office Furniture (including Fixtures) Manufacturing	r43-H GMI LyC M D1	0.205	0.994	GI. Household: Mixed income, provide cleaning and care of clothing and shoes, decile 1, men
r5-3365	0.0919	0.7260	G&S: Railroad Rolling Stock Manufacturing	r3-2222	0.204	0.988	G&S. Gas supply pipeline to the final consumer
r26-3334	0.0848	0.9648	P: Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing	r1-1152	0.202	0.954	G&S. Support Activities for Animal Production
r5-3335	0.0724	0.1722	G&S: Metalworking Machinery Manufacturing	r43-H w s D7	0.196	0.994	Generation of income. Household: Wage and salaries, decile 7
r46-NPIsSH	0.0716	0.7680	UI: NPIsSH	r1-1142	0.195	0.988	G&S. Hunting and Trapping
r5-3345	0.0587	0.3979	G&S: Navigational, Measuring, Electromedical, and Control Instruments Manufacturing	r16-6242	0.194	0.956	G&S. Community Food and Housing, and Emergency and Other Relief Services
r45-NPIsSH	0.0052	0.8812	DI: NPIsSH	r43-NPIsSH CIXnonpension	0.194	0.410	GI. NPIsSH: imputed contribution by employers for nonpension
r5-3334	0.0005	0.7263	G&S: Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment	r16-6222	0.194	0.978	G&S. Psychiatric and Substance Abuse Hospitals
r43-G gos	-0.6513	0.1132	GI. Government: Gross operating surplus	r16-6232	0.194	0.908	G&S. Residential Intellectual and Developmental Disability, Mental Health, and Substance Abuse Facilities

**Table 19. Independent Institutional and Economic Sectors – continuation –**

a) The rest of the world likes exogenous variable				b) The rest of the world likes endogenous variable			
Variable code	Standardized forward linkages	Standardized backward linkages	Name	Variable code	Standardized forward linkages	Standardized backward linkages	Name
				r16-6231	0.194	0.997	G&S. Nursing Care Facilities (Skilled Nursing Facilities)
				r16-6243	0.194	0.924	G&S. Vocational Rehabilitation Services
				r43-H cfcgmi	0.194	0.994	GI. Household: Consumption of fixed capital on gross mixed income
				r43-G is	0.194	0.194	GI. Government: Import subsidies
				r43-G es	0.194	0.194	GI. Government: Export subsidies
				r47-RW	0.194	0.194	C. The rest of the world (RW)
				r49-pay RM	0.194	0.194	F. Other accounts receivable / payable. RW
				r43-G cfcgos	0.161	0.194	GI. Government: Consumption of fixed capital on gross operating surplus
				r45-RW	0.150	0.210	DI: NFIRM
				r43-F cfcgos	0.142	0.837	GI. Financial companies: Consumption of fixed capital on gross operating surplus
				r45-NPIsSH	0.126	0.055	DI: NPIsSH
				r46-NF	-1.329	-0.238	UI: Non-financial companies
				r45-NF	-1.764	-0.044	DI: Non-financial companies
				r43-H cfcgos	-3.439	0.994	GI. Household: Consumption of fixed capital on gross operating surplus
				r43-NF cfcgos	-4.113	0.180	GI. Non-financial companies: Consumption of fixed capital on gross operating surplus

**Table 20. Variable Code. Social Accounting Matrix**

Variable code	Variable code	NAICS	Name
Goods & Services Account (G&S)	Production Account (P)		
r1-1111	r22-1111	1111	Oilseed and Grain Farming
r1-1112	r22-1112	1112	Vegetable and Melon Farming
r1-1113	r22-1113	1113	Fruit and Tree Nut Farming
r1-1114	r22-1114	1114	Greenhouse, Nursery, and Floriculture Production
r1-1119	r22-1119	1119	Other Crop Farming
r1-1121	r22-1121	1121	Cattle Ranching and Farming
r1-1122	r22-1122	1122	Hog and Pig Farming
r1-1123	r22-1123	1123	Poultry and Egg Production
r1-1124	r22-1124	1124	Sheep and Goat Farming
r1-1125	r22-1125	1125	Aquaculture
r1-1129	r22-1129	1129	Other Animal Production
r1-1131	r22-1131	1131	Timber Tract Operations

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r1-1132	r22-1132	1132	Forest Nurseries and Gathering of Forest Products
r1-1133	r22-1133	1133	Logging
r1-1141	r22-1141	1141	Fishing
r1-1142	r22-1142	1142	Hunting and Trapping
r1-1151	r22-1151	1151	Support Activities for Crop Production
r1-1152	r22-1152	1152	Support Activities for Animal Production
r1-1153	r22-1153	1153	Support Activities for Forestry
r2-2111	r23-2111	2111	Oil and Gas Extraction
r2-2121	r23-2121	2121	Coal Mining
r2-2122	r23-2122	2122	Metal Ore Mining
r2-2123	r23-2123	2123	Nonmetallic Mineral Mining and Quarrying
r2-2131	r23-2131	2131	Support Activities for Mining
r3-2211	r24-2211	2211	Electric Power Generation, Transmission and Distribution
r3-2221	r24-2221	2221	Water collection, treatment and supply of water
r3-2222	r24-2222	2222	Gas supply pipeline to the final consumer
r4	r25	23	Construction
r5-3111	r26-3111	3111	Animal Food Manufacturing
r5-3112	r26-3112	3112	Grain and Oilseed Milling
r5-3113	r26-3113	3113	Sugar and Confectionery Product Manufacturing
r5-3114	r26-3114	3114	Fruit and Vegetable Preserving and Specialty Food Manufacturing
r5-3115	r26-3115	3115	Dairy Product Manufacturing
r5-3116	r26-3116	3116	Animal Slaughtering and Processing
r5-3117	r26-3117	3117	Seafood Product Preparation and Packaging
r5-3118	r26-3118	3118	Bakeries and Tortilla Manufacturing
r5-3119	r26-3119	3119	Other Food Manufacturing
r5-3121	r26-3121	3121	Beverage Manufacturing
r5-3122	r26-3122	3122	Tobacco Manufacturing

Table 21. Variable Code. Social Accounting Matrix – continuation -

Variable code Goods & Services Account (G&S)	Variable code Production Account (P)	NAICS	Name
r5-3131	r26-3131	3131	Fiber, Yarn, and Thread Mills
r5-3132	r26-3132	3132	Fabric Mills
r5-3133	r26-3133	3133	Textile and Fabric Finishing and Fabric Coating Mills
r5-3141	r26-3141	3141	Textile Furnishings Mills
r5-3149	r26-3149	3149	Other Textile Product Mills
r5-3151	r26-3151	3151	Apparel Knitting Mills
r5-3152	r26-3152	3152	Cut and Sew Apparel Manufacturing
r5-3159	r26-3159	3159	Apparel Accessories and Other Apparel Manufacturing
r5-3161	r26-3161	3161	Leather and Hide Tanning and Finishing
r5-3162	r26-3162	3162	Footwear Manufacturing
r5-3169	r26-3169	3169	Other Leather and Allied Product Manufacturing
r5-3211	r26-3211	3211	Sawmills and Wood Preservation
r5-3212	r26-3212	3212	Veneer, Plywood, and Engineered Wood Product Manufacturing
r5-3219	r26-3219	3219	Other Wood Product Manufacturing
r5-3221	r26-3221	3221	Pulp, Paper, and Paperboard Mills
r5-3222	r26-3222	3222	Converted Paper Product Manufacturing
r5-3231	r26-3231	3231	Printing and Related Support Activities
r5-3241	r26-3241	3241	Petroleum and Coal Products Manufacturing
r5-3251	r26-3251	3251	Basic Chemical Manufacturing

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r5-3252	r26-3252	3252	Resin, Synthetic Rubber and Artificial Synthetic Fibers and Filaments Manufacturing
r5-3253	r26-3253	3253	Pesticide, Fertilizer and Other Agricultural Chemical Manufacturing
r5-3254	r26-3254	3254	Pharmaceutical and Medicine Manufacturing
r5-3255	r26-3255	3255	Paint, Coating, and Adhesive Manufacturing
r5-3256	r26-3256	3256	Soap, Cleaning Compound, and Toilet Preparation Manufacturing
r5-3259	r26-3259	3259	Other Chemical Product and Preparation Manufacturing
r5-3261	r26-3261	3261	Plastics Product Manufacturing
r5-3262	r26-3262	3262	Rubber Product Manufacturing
r5-3271	r26-3271	3271	Clay Product and Refractory Manufacturing
r5-3272	r26-3272	3272	Glass and Glass Product Manufacturing
r5-3273	r26-3273	3273	Cement and Concrete Product Manufacturing
r5-3274	r26-3274	3274	Lime and Gypsum Product Manufacturing
r5-3279	r26-3279	3279	Other Nonmetallic Mineral Product Manufacturing
r5-3311	r26-3311	3311	Iron and Steel Mills and Ferroalloy Manufacturing
r5-3312	r26-3312	3312	Steel Product Manufacturing from Purchased Steel
r5-3313	r26-3313	3313	Alumina and Aluminum Production and Processing
r5-3314	r26-3314	3314	Nonferrous Metal (except Aluminum) Production and Processing
r5-3315	r26-3315	3315	Foundries
r5-3321	r26-3321	3321	Forging and Stamping
r5-3322	r26-3322	3322	Cutlery and Handtool Manufacturing
r5-3323	r26-3323	3323	Architectural and Structural Metals Manufacturing
r5-3324	r26-3324	3324	Boiler, Tank, and Shipping Container Manufacturing
r5-3325	r26-3325	3325	Hardware Manufacturing
r5-3326	r26-3326	3326	Spring and Wire Product Manufacturing
r5-3327	r26-3327	3327	Machine Shops: Turned Product and Screw, Nut, and Bolt Manufacturing
r5-3328	r26-3328	3328	Coating, Engraving, Heat Treating, and Allied Activities
r5-3329	r26-3329	3329	Other Fabricated Metal Product Manufacturing
r5-3331	r26-3331	3331	Agriculture, Construction, and Mining Machinery Manufacturing
r5-3332	r26-3332	3332	Industrial Machinery Manufacturing
r5-3333	r26-3333	3333	Commercial and Service Industry Machinery Manufacturing
r5-3334	r26-3334	3334	Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing
r5-3335	r26-3335	3335	Metalworking Machinery Manufacturing
r5-3336	r26-3336	3336	Engine, Turbine, and Power Transmission Equipment Manufacturing
r5-3339	r26-3339	3339	Other General Purpose Machinery Manufacturing
r5-3341	r26-3341	3341	Computer and Peripheral Equipment Manufacturing
r5-3342	r26-3342	3342	Communications Equipment Manufacturing
r5-3343	r26-3343	3343	Audio and Video Equipment Manufacturing
r5-3344	r26-3344	3344	Semiconductor and Other Electronic Component Manufacturing
r5-3345	r26-3345	3345	Navigational, Measuring, Electromedical, and Control Instruments Manufacturing
r5-3346	r26-3346	3346	Manufacturing and Reproducing Magnetic and Optical Media
r5-3351	r26-3351	3351	Electric Lighting Equipment Manufacturing
r5-3352	r26-3352	3352	Household Appliance Manufacturing
r5-3353	r26-3353	3353	Electrical Equipment Manufacturing
r5-3359	r26-3359	3359	Other Electrical Equipment and Component Manufacturing
r5-3361	r26-3361	3361	Motor Vehicle Manufacturing
r5-3362	r26-3362	3362	Motor Vehicle Body and Trailer Manufacturing
r5-3363	r26-3363	3363	Motor Vehicle Parts Manufacturing
r5-3364	r26-3364	3364	Aerospace Product and Parts Manufacturing
r5-3365	r26-3365	3365	Railroad Rolling Stock Manufacturing
r5-3366	r26-3366	3366	Ship and Boat Building
r5-3369	r26-3369	3369	Other Transportation Equipment Manufacturing
r5-3371	r26-3371	3371	Household and Institutional Furniture and Kitchen Cabinet Manufacturing
r5-3372	r26-3372	3372	Office Furniture (including Fixtures) Manufacturing
r5-3379	r26-3379	3379	Other Furniture Related Product Manufacturing
r5-3391	r26-3391	3391	Medical Equipment and Supplies Manufacturing
r5-3399	r26-3399	3399	Other Miscellaneous Manufacturing

Table 22. Variable Code. Social Accounting Matrix – continuation -

Variable code	Variable code	NAICS code	Name
Goods & Services Account (G&S)	Production Account (P)		
r6	r27	43-46	Wholesale Trade & Retail Trade
r7-4862	r28-4862	4862	Pipeline Transportation of Natural Gas
r7-4869	r28-4869	4869	Other Pipeline Transportation
r7-RESTO 48	r28-RESTO 48	see Table 3	THE REST OF THE SECTOR 48: Transportation
r8	r29	49	Postal Service and Warehousing
r9	r30	51	Information
r10-5211	r31-5211	5211	Monetary Authorities-Central Bank
r10-5221	r31-5221	5221	Depository Credit Intermediation
r10-5222	r31-5222	5222	Nondepository Credit Intermediation
r10-5223	r31-5223	5223	Activities Related to Credit Intermediation
r10-5224	r31-5224	5224	Securities and Commodity Contracts Intermediation and Brokerage
r10-5225	r31-5225	5225	Services related to credit intermediation-exchange
r10-5231	r31-5231	5231	Brokerage, exchange and exchange centers
r10-5232	r31-5232	5232	Securities and Commodity Exchanges
r10-5239	r31-5239	5239	Other Financial Investment Activities
r10-5241	r31-5241	5241	Insurance Carriers
r10-5242	r31-5242	5242	Agencies, Brokerages, and Other Insurance Related Activities
r11	r32	53	Real Estate and Rental and Leasing
r12	r33	54	Professional, Scientific, and Technical Services
r13	r34	55	Management of Companies and Enterprises
r14-561	r35-561	see Table 3	THE REST OF THE SUB-SECTOR 561: Administrative and Support Services
r14-5621	r35-5621	5621	Waste Collection
r15	r36	61	Educational Services
r16-6214	r37-6214	6214	Outpatient Care Centers
r16-6216	r37-6216	6216	Home Health Care Services
r16-RESTO 621	r37-RESTO 621	see Table 3	THE REST OF THE SUB-SECTOR 621: Ambulatory Health Care Services
r16-6221	r37-6221	6221	General Medical and Surgical Hospitals
r16-6222	r37-6222	6222	Psychiatric and Substance Abuse Hospitals
r16-6223	r37-6223	6223	Specialty (except Psychiatric and Substance Abuse) Hospitals
r16-6231	r37-6231	6231	Nursing Care Facilities (Skilled Nursing Facilities)
r16-6232	r37-6232	6232	Residential Intellectual and Developmental Disability, Mental Health, and Substance Abuse Facilities
r16-6233	r37-6233	6233	Continuing Care Retirement Communities and Assisted Living Facilities for the Elderly
r16-6239	r37-6239	6239	Other Residential Care Facilities
r16-6241	r37-6241	6241	Individual and Family Services
r16-6242	r37-6242	6242	Community Food and Housing, and Emergency and Other Relief Services
r16-6243	r37-6243	6243	Vocational Rehabilitation Services
r16-6244	r37-6244	6244	Child Day Care Services
r17	r38	71	Arts, Entertainment, and Recreation
r18	r39	72	Accommodation and Food Services
r19-8141	r40-8141	8141	Private Households
r19-RESTO 81	r40-RESTO 81	see Table 3	THE REST OF THE SECTOR 81: Other Services (except Public Administration)
r20-9311	r41-9311	9311	Legislatures
r20-9312	r41-9312	9312	General public administration
r20-9313	r41-9313	9313	Regulating and promoting economic development
r20-9314	r41-9314	9314	Law enforcement and maintenance of security and public order
r20-9315	r41-9315	9315	Regulation and promotion of activities to improve and preserve the environment
r20-9316	r41-9316	9316	Administrative activities of social welfare institutions
r20-9317	r41-9317	9317	Foreign affairs

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r20-9318	r41-9318	9318	National security activities
r20-9321	r41-9321	9321	International and extraterritorial organizations and bodies
r21	r42		Direct net purchases of residents and non-residents
r43-NF w s			Generation of income. Non-financial companies: wage and salaries
r43-NF			Generation of income. Non-financial companies: effective employer contribution for pension
r43-NF			Generation of income. Non-financial companies: effective employer contribution for nonpension
r43-NF			Generation of income. Non-financial companies: imputed contribution by employers for pension
r43-NF			Generation of income. Non-financial companies: imputed contribution by employers for nonpension
r43-N gos			Generation of income. Non-financial companies: gross operating surplus
r43-NF cfcgos			Generation of income. Non-financial companies: Consumption of fixed capital on gross operating surplus
r43-F w s			Generation of income. Financial companies: wage and salaries
r43-F CExpansion			Generation of income. Financial companies: effective employer contribution for pension
r43-F			Generation of income. Financial companies: effective employer contribution for nonpension
r43-F CExpansion			Generation of income. Financial companies: imputed contribution by employers for pension
r43-F			Generation of income. Financial companies: imputed contribution by employers for nonpension
r43-F gos			Generation of income. Financial companies: gross operating surplus
r43-F cfcgos			Generation of income. Financial companies: Consumption of fixed capital on gross operating surplus
r43-G w s			Generation of income. Government: Wage and salaries
r43-G			Generation of income. Government: effective employer contribution for pension
r43-G			Generation of income. Government: effective employer contribution for nonpension
r43-G CExpansion			Generation of income. Government: imputed contribution by employers for pension
r43-G			Generation of income. Government: imputed contribution by employers for nonpension
r43-G vat			Generation of income. Government: value added tax (VAT)
r43-G id			Generation of income. Government: import duties
r43-G ti			Generation of income. Government: Taxes on imports excluding VAT and duties

Table 23. Variable Code. Social Accounting Matrix – continuation -

Variable code	Variable code	NAICS code	Name
Goods & Services Account (G&S)	Production Account (P)		
r43-G toe			Generation of income. Government: Taxes on exports
r43-G ie			Generation of income. Government: Import & exports
r43-G othertop			Generation of income. Government: Other taxes on production
r43-G is			Generation of income. Government: Import subsidies
r43-G es			Generation of income. Government: Export subsidies
r43-G othersp			Generation of income. Government: Other subsidies on products
r43-G ospn			Generation of income. Government: Other subsidies on production
r43-G gos			Generation of income. Government: Gross operating surplus
r43-G cfcgos			Generation of income. Government: Consumption of fixed capital on gross operating surplus
r43-G ntops			Generation of income. Government: Net taxes on products subsidies
r43-H w s D1			Generation of income. Household: Wage and salaries. decile 1
r43-H w s D2			Generation of income. Household: Wage and salaries. decile 2
r43-H w s D3			Generation of income. Household: Wage and salaries. decile 3
r43-H w s D4			Generation of income. Household: Wage and salaries. decile 4
r43-H w s D5			Generation of income. Household: Wage and salaries. decile 5
r43-H w s D6			Generation of income. Household: Wage and salaries. decile 6
r43-H w s D7			Generation of income. Household: Wage and salaries. decile 7
r43-H w s D8			Generation of income. Household: Wage and salaries. decile 8
r43-H w s D9			Generation of income. Household: Wage and salaries. decile 9
r43-H w s D10			Generation of income. Household: Wage and salaries. decile 10

.....Continue

r43-H CExpension			Generation of income. Household: Effective employer contribution for pension
r43-H CExnnonpension			Generation of income. Household: Effective employer contribution for nonpension
r43-H CIXpension			Generation of income. Household: Imputed contribution by employers for pension
r43-H CIXnonpension			Generation of income. Household: Imputed contribution by employers for nonpension
r43-H gos			Generation of income. Household: Gross operating surplus
r43-H cfegos			Generation of income. Household: Consumption of fixed capital on gross operating surplus
r43-H GMI A W D1			Generation of income. Household: Mixed income. provide food. decile 1. women
r43-H GMI A W D2			Generation of income. Household: Mixed income. provide food. decile 2. women
r43-H GMI A W D3			Generation of income. Household: Mixed income. provide food. decile 3. women
r43-H GMI A W D4			Generation of income. Household: Mixed income. provide food. decile 4. women
r43-H GMI A W D5			Generation of income. Household: Mixed income. provide food. decile 5. women
r43-H GMI A M D1			Generation of income. Household: Mixed income. provide food. decile 1. men
r43-H GMI A M D2			Generation of income. Household: Mixed income. provide food. decile 2. men
r43-H GMI A M D3			Generation of income. Household: Mixed income. provide food. decile 3. men
r43-H GMI A M D4			Generation of income. Household: Mixed income. provide food. decile 4. men
r43-H GMI A M D5			Generation of income. Household: Mixed income. provide food. decile 5. men
r43-H GMI LvM W D1			Generation of income. Household: Mixed income. provide cleaning and maintenance of housing. decile 1. women
r43-H GMI LvM W D2			Generation of income. Household: Mixed income. provide cleaning and maintenance of housing. decile 2. women
r43-H GMI LvM W D3			Generation of income. Household: Mixed income. provide cleaning and maintenance of housing. decile 3. women
r43-H GMI LvM W D4			Generation of income. Household: Mixed income. provide cleaning and maintenance of housing. decile 4. women
r43-H GMI LvM W D5			Generation of income. Household: Mixed income. provide cleaning and maintenance of housing. decile 5. women
r43-H GMI LvM M D1			Generation of income. Household: Mixed income. provide cleaning and maintenance of housing. decile 1. men
r43-H GMI LvM M D2			Generation of income. Household: Mixed income. provide cleaning and maintenance of housing. decile 2. men
r43-H GMI LvM M D3			Generation of income. Household: Mixed income. provide cleaning and maintenance of housing. decile 3. men
r43-H GMI LvM M D4			Generation of income. Household: Mixed income. provide cleaning and maintenance of housing. decile 4. men
r43-H GMI LvM M D5			Generation of income. Household: Mixed income. provide cleaning and maintenance of housing. decile 5. men
r43-H GMI LvC W D1			Generation of income. Household: Mixed income. provide cleaning and care of clothing and shoes. decile 1. women
r43-H GMI LvC W D2			Generation of income. Household: Mixed income. provide cleaning and care of clothing and shoes. decile 2. women
r43-H GMI LvC W D3			Generation of income. Household: Mixed income. provide cleaning and care of clothing and shoes. decile 3. women
r43-H GMI LvC W D4			Generation of income. Household: Mixed income. provide cleaning and care of clothing and shoes. decile 4. women
r43-H GMI LvC W D5			Generation of income. Household: Mixed income. provide cleaning and care of clothing and shoes. decile 5. women
r43-H GMI LvC M D1			Generation of income. Household: Mixed income. provide cleaning and care of clothing and shoes. decile 1. men
r43-H GMI LvC M D2			Generation of income. Household: Mixed income. provide cleaning and care of clothing and shoes. decile 2. men
r43-H GMI LvC M D3			Generation of income. Household: Mixed income. provide cleaning and care of clothing and shoes. decile 3. men
r43-H GMI LvC M D4			Generation of income. Household: Mixed income. provide cleaning and care of clothing and shoes. decile 4. men
r43-H GMI LvC M D5			Generation of income. Household: Mixed income. provide cleaning and care of clothing and shoes. decile 5. men
r43-H GMI CA W D1			Generation of income. Household: Mixed income. provide shopping and household management. decile 1. women
r43-H GMI CA W D2			Generation of income. Household: Mixed income. provide shopping and household management. decile 2. women
r43-H GMI CA W D3			Generation of income. Household: Mixed income. provide shopping and household management. decile 3. women
r43-H GMI CA W D4			Generation of income. Household: Mixed income. provide shopping and household management. decile 4. women
r43-H GMI CA W D5			Generation of income. Household: Mixed income. provide shopping and household management. decile 5. women
r43-H GMI CA M D1			Generation of income. Household: Mixed income. provide shopping and household management. decile 1. men
r43-H GMI CA M D2			Generation of income. Household: Mixed income. provide shopping and household management. decile 2. men
r43-H GMI CA M D3			Generation of income. Household: Mixed income. provide shopping and household management. decile 3. men
r43-H GMI CA M D4			Generation of income. Household: Mixed income. provide shopping and household management. decile 4. men
r43-H GMI CA M D5			Generation of income. Household: Mixed income. provide shopping and household management. decile 5. men
r43-H GMI CvA W D1			Generation of income. Household: Mixed income. providing care and support. decile 1. women
r43-H GMI CvA W D2			Generation of income. Household: Mixed income. providing care and support. decile 2. women
r43-H GMI CvA W D3			Generation of income. Household: Mixed income. providing care and support. decile 3. women
r43-H GMI CvA W D4			Generation of income. Household: Mixed income. providing care and support. decile 4. women
r43-H GMI CvA W D5			Generation of income. Household: Mixed income. providing care and support. decile 5. women
r43-H GMI CvA M D1			Generation of income. Household: Mixed income. providing care and support. decile 1. men
r43-H GMI CvA M D2			Generation of income. Household: Mixed income. providing care and support. decile 2. men
r43-H GMI CvA M D3			Generation of income. Household: Mixed income. providing care and support. decile 3. men
r43-H GMI CvA M D4			Generation of income. Household: Mixed income. providing care and support. decile 4. men
r43-H GMI CvA M D5			Generation of income. Household: Mixed income. providing care and support. decile 5. men

Table 24. Variable Code. Social Accounting Matrix – continuation –

Variable code	Variable code	NAICS code	Name
Goods & Services Account (G&S)	Production Account (P)		
r43-H GMI AoH W D1			Generation of income. Household: Mixed income. provide help to other households and volunteer work. decile 1. women
r43-H GMI AoH W D2			Generation of income. Household: Mixed income. provide help to other households and volunteer work. decile 2. women
r43-H GMI AoH W D3			Generation of income. Household: Mixed income. provide help to other households and volunteer work. decile 3. women
r43-H GMI AoH W D4			Generation of income. Household: Mixed income. provide help to other households and volunteer work. decile 4. women
r43-H GMI AoH W D5			Generation of income. Household: Mixed income. provide help to other households and volunteer work. decile 5. women
r43-H GMI AoH M D1			Generation of income. Household: Mixed income. provide help to other households and volunteer work. decile 1. men
r43-H GMI AoH M D2			Generation of income. Household: Mixed income. provide help to other households and volunteer work. decile 2. men
r43-H GMI AoH MW D3			Generation of income. Household: Mixed income. provide help to other households and volunteer work. decile 3. men
r43-H GMI AoH M D4			Generation of income. Household: Mixed income. provide help to other households and volunteer work. decile 4. men
r43-H GMI AoH M D5			Generation of income. Household: Mixed income. provide help to other households and volunteer work. decile 5. men
r43-H cfcgmi			Generation of income. Household: Consumption of fixed capital on gross mixed income
r43-NPIsSH w s			Generation of income. NPIsSH: Wage and salaries
r43-NPIsSH CExpansion			Generation of income. NPIsSH: effective employer contribution for pension
r43-NPIsSH			Generation of income. NPIsSH: effective employer contribution for nonpension
r43-NPIsSH CExpansion			Generation of income. NPIsSH: imputed contribution by employers for pension
r43-NPIsSH			Generation of income. NPIsSH: imputed contribution by employers for nonpension
r43-NPIsSH gos			Generation of income. NPIsSH: gross operating surplus
r43-NPIsSH cfcgos			Generation of income. NPIsSH: Consumption of fixed capital on gross operating surplus
r43-RW			Generation of income. RW: Wage and salaries
r44-NF			Primary allocation of income: Non-financial companies
r44-F			Primary allocation of income: Financial companies
r44-G GDP-CFC			Primary allocation of income: Government
r44-G ntons			Primary allocation of income: Government. Net taxes on products subsidies
r44-H D1			Primary allocation of income: Household. decile 1
r44-H D2			Primary allocation of income: Household. decile 2
r44-H D3			Primary allocation of income: Household. decile 3
r44-H D4			Primary allocation of income: Household. decile 4
r44-H D5			Primary allocation of income: Household. decile 5
r44-H D6			Primary allocation of income: Household. decile 6
r44-H D7			Primary allocation of income: Household. decile 7
r44-H D8			Primary allocation of income: Household. decile 8
r44-H D9			Primary allocation of income: Household. decile 9
r44-H D10			Primary allocation of income: Household. decile 10
r44-NPIsSH			Primary allocation of income: NPIsSH
r44-NFIRW			Primary allocation of income: Net Factorial Incomes of the Rest of the World (NFIRW)
r45-NF			Distribution of incomes: Non-financial companies
r45-F			Distribution of incomes: Financial companies
r45-G GDP-CFC			Distribution of incomes: Government
r45-G ntons			Distribution of incomes: Government. Net taxes on products subsidies
r45-H D1			Distribution of incomes: Household. decile 1
r45-H D2			Distribution of incomes: Household. decile 2
r45-H D3			Distribution of incomes: Household. decile 3
r45-H D4			Distribution of incomes: Household. decile 4
r45-H D5			Distribution of incomes: Household. decile 5
r45-H D6			Distribution of incomes: Household. decile 6
r45-H D7			Distribution of incomes: Household. decile 7
r45-H D8			Distribution of incomes: Household. decile 8
r45-H D9			Distribution of incomes: Household. decile 9

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sr45-H D10			Distribution of incomes: Household, decile 10
r45-NPIsSH			Distribution of incomes: NEIRW
r45-RW			Distribution of incomes: RW
r46-NF			Use of income: Non-financial companies
r46-F			Use of income: Financial companies
r46-G			Use of income: Government
r46-H D1			Use of income: Household, decile 1
r46-H D2			Use of income: Household, decile 2
r46-H D3			Use of income: Household, decile 3
r46-H D4			Use of income: Household, decile 4
r46-H D5			Use of income: Household, decile 5
r46-H D6			Use of income: Household, decile 6
r46-H D7			Use of income: Household, decile 7
r46-H D8			Use of income: Household, decile 8
r46-H D9			Use of income: Household, decile 9
r46-H D10			Use of income: Household, decile 10
r46-NPIsSH			Use of income: NPIsSH
r46-RW			Use of income: RW
r47-NF			Capital, Non-financial companies
r47-F			Capital, Financial companies
r47-G			Capital, Government
r47-H D1			Capital, Household, decile 1
r47-H D2			Capital, Household, decile 2
r47-H D3			Capital, Household, decile 3
r47-H D4			Capital, Household, decile 4
r47-H D5			Capital, Household, decile 5

Table 25. Variable Code. Social Accounting Matrix – continuation –

Variable code	Variable code	NAICS code	Name
Goods & Services Account (G&S)	Production Account (P)		
r47-H D6			Capital, Household, decile 6
r47-H D7			Capital, Household, decile 7
r47-H D8			Capital, Household, decile 8
r47-H D9			Capital, Household, decile 9
r47-H D10			Capital, Household, decile 10
r47-NPIsSH			Capital, NPIsSH
r47-RW			Capital, RW
r48-NF			Gross fixed capital formation, Non-financial companies
r48-F			Gross fixed capital formation, Financial companies
r48-G			Gross fixed capital formation, Government
r48-H D1			Gross fixed capital formation, Household, decile 1
r48-H D2			Gross fixed capital formation, Household, decile 2
r48-H D3			Gross fixed capital formation, Household, decile 3
r48-H D4			Gross fixed capital formation, Household, decile 4
r48-H D5			Gross fixed capital formation, Household, decile 5
r48-H D6			Gross fixed capital formation, Household, decile 6

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r48-H D7			Gross fixed capital formation. Household. decile 7
r48-H D8			Gross fixed capital formation. Household. decile 8
r48-H D9			Gross fixed capital formation. Household. decile 9
r48-H D10			Gross fixed capital formation. Household. decile 10
r48-NPIsSH			Gross fixed capital formation. NPIsSH
r48-RW			Gross fixed capital formation. RW
r49-Monetary gold			Monetary gold
r49-DEG			Special Drawing Rights. SDR
r49-Legal MNR			Legal money. National. Residents.
r49-Legal MNnR			Legal money. National. Non-residents.
r49-LMIPNR			Legal money. Interbank position. Residents.
r49-LMIPNnR			Legal money. Interbank position. Non-residents.
r49-OTDNR			Other transferable deposits. National. Residents.
r49-OTDNnR			Other transferable deposits. National. Non-residents.
r49-ODNR			Other deposits. National. Residents.
r49-ODNnR			Other deposits. National. Non-residents.
r49-NC			National currency
r49-FC			Foreign currency
r49-Lst			Loans short-time
r49-Llt			Loans long-time
r49-AC			Quoted shares
r49-AnC			Non-quoted shares
r49-Aop			Other shares
r49-Share MM			Shares / units in money market funds
r49-Share Inv			Shares / units of other investment funds
r49-Insurance non-Life			Technical reserves of non-life insurance
r49-Insurance Life			Technical reserves of life insurance
r49-pension R			Pension rights
r49-Cpension			Claims of pension funds on the sponsor (employer)
r49-B non-pensioners			Rights non-pension benefits
r49-Warrantv			Provisions for warrantv claims standardized
r49-Options			Options
r49-Forwards			Forwards
r49-ESO			Employee stock options
r49-Trade credits			Trade credits and advances
r49-nav R			Other accounts receivable / payable. Residents.
r49-nav RW			Other accounts receivable / payable. RW
r49-discrepancy			Statistical discrepancy
r50-CT Canada			Current transfers to the rest of the world: Canada
r50-CT USA			Current transfers to/from the rest of the world: EUA
r50-CT RW2			Current transfers to/from the rest of the world: Other (RW2)
r51-TK NF			Capital transfers: Non-financial
r51-TK F			Capital transfers: Financial
r51-TK G			Capital transfers: Government
r51-TK H			Capital transfers: Household
r51-TK NPIsSH			Capital transfers: NPIsSH
r52 adi			Adjustment

Independent activities of secondary and thirdly sectors are nonmetallic mineral mining and quarrying, construction, the manufacturing of other food, glass and glass product, fruit and vegetable preserving and specialty food, ventilation, heating, air-conditioning and commercial refrigeration equipment, clay product and refractory, securities and commodity contracts intermediation and brokerage, agencies, brokerages and other insurances related activities, non-depository credit intermediation, ambulatory health care services, privates households, monetary authorities-central bank, etc. Other independent activities are the rental of property of NFIRW, remuneration and net value added (NVA), these represented by wage and salaries of financial companies, NPIsSH and household decile 8. And imputed contribution by employers and effective employer contribution for non-pension of non-financial companies. From tables XVI-XX, the independent activities that strengthen the internal market are showed in table 7. Mainly regarding GVP and flow of production of health, environment and regulation and financing. It is remarkable the rental of property of net factorial income of the rest of the world (NFIRW).

## Conclusions

When good and services with outside account is endogenous variable reflects the impacts under commercial opening (NAFTA), for example, the most important key linkage is current transferences to/from USA, in the case of strategic activity is the gross operating surplus of non-financial companies; leading sectors are manufacturing and current transferences from/to decile 8 of income; and independent linkage are in the primary and thirdly sectors. Mexico went from a producer of goods to a service provider country, losing value added in their production chains. This weakened the domestic market and thus the sources well-paid work. As close economy, primary sector changed from key sector to independent linkages sector. Wholesale Trade & Retail Trade sub-sectors are key activities now while before oil and gas extraction were the mainly key sector. Now, the energy opening under energetic reform is going to change this sector. The results reinforce the arguments of Mckinsey (Eduardo Bolio, Jaana Remes, Tomás Lajous, James Manyika, Morten Rossé and Eugenia Ramírez, 2014) on the two-speeds of the Mexican economy: a highly productive modern economy and a low-productivity traditional economy. Traditional Mexico is creating more (informal) jobs than Modern Mexico.

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