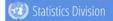


# Overview of supply and use tables

## Regional Course on Supply and Use Tables Chiba, Japan 20-24 January 2020

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United Nations Statistics Division



# Outline of presentation



- What are supply and use tables (SUTs)?
- Simplified SUTs
- Benefits of SUTs
- Reference

### What are SUTs?



- Part of the wider Input-Output Table 'family', SUTs are designed to support the production of GDP through coherent and regular benchmarking of estimates
- Matrices by production and industry showing the production processes and transactions for particular products or industries
- Scalable to country circumstance and economy (using standard product and industry classifications)



## What are SUTs?



### Two interlinked tables

### Supply table

 Describes the supply of goods and services, which are either produced in the domestic industry or imported

#### Use table

- Shows where and how goods and services are used (final/intermediate) in the economy
- Shows the income generated in the production process

# Simplified SUTs



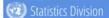
### Supply table

Industries		Indus				
Products	Agriculture, forestry, etc.	Mining and quarrying		Services	Imports	Total
Agriculture, forestry, etc.						
Ores and minerals; etc.	0	utput by prod	Imports by	Total supply		
	_		product	by product		
Services						
Total		Total Output	Total imports	Total supply		

#### Use table

Industries		Indu	stries					
Products	Agriculture, forestry, etc.	Mining and quarrying		Services	Final consumption	Gross capital formation	Exports	Total
Agriculture, forestry, etc. Ores and minerals; etc Services		consumption	by product and	d by industry	Final uses b	Total use by product		
Value added	Value a	dded by comp	onent and by i	ndustry			Value added	
Total		Total Output	by industry		Total fi			

Empty cells by definition



# Simplified SUTs - Main identities (1)



### Supply table

			Industries					Ī	
		Agricul- ture	Manufact. and Construction	Services	Output	Imports	Total supply		
	Agriculture	270	30	50	350	20 /	370	$  \rangle$	
,,	Manufacturing	6	380	87	473	42	515	١ ١	١
Products	Construction	4	50	13	67	8	75		١
0	Trade, transport and communication	10	15	210	235	†	242		$\vdash$
l-	Finance and business services	6	17	240	263	11	274		
	Other services	4	8	100	112	12	124	1	
	Total	300	500	700	1 500	100	1 600	1/	
_						-	1	/	

Use	tab	le

			Industr	ies		F	inal use		
		Agricul- ture	Manufact. and Construction	Services	Total	Final consumption expenditure	Gross capital formation	Exports	rotal use
	Agriculture	34	59	93	186	131	21	32	370
s	Manufacturing	97	107	57	261	122	73	59	515
roducts	Construction	9	12	4	25	17	30	3	75
8	Trade, transport and communication	42	24	11	77	140	20	5	242
۵	Finance and business services	14	53	42	109	116	31	18	274
	Other services	14	35	22	71	35	10	8	124
	Total	210	290	229	729	561	185	125	1600
	GVA	90	210	471	771				
	Total	300	500	700	1 500				

### Main identities (1) Supply = Use

Output + Imports= Intermediate consumption + Final consumption + capital formation + Exports

e.g.

For product 'agriculture'

350+20 = 370

=34+59+93+131+21+32

For the whole economy:

1500+100 = 1600

=210+290+229+561+185+125



# Simplified SUTs - Main identities (2)



Supply table

		Industr				
		Agricul- Manufact. and Services ture Construction		Total	Imports	Total supply
Agriculture	270	30	50	350	20	370
Manufacturing	6	380	87	473	42	515
Construction	4	50	13	67	8	75
Trade, transport and communication	10	15	210	235	7	242
Finance and business services	6	17	240	263	11	274
Other services	_4_	8	100	112	12	124
Total		500	700	1 500	100	1 600
	Manufacturing Construction Trade, transport and communication Finance and business services Other services	Agriculture         270           Manufacturing         6           Construction         4           Trade, transport and communication         10           Finance and business services         6           Other services         4	ture   Construction	ture   Construction	ture   Construction   370   30   50   350	Ture   Construction   350   20

## Main identities (2) Output = Input

Output = Intermediate consumption + GVA

e.g.

For Industry 'Agriculture'

300 = 210 + 90

For the whole economy:

1500= 729 + 771

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# Simplified SUTs - Main identities (3)



Supply table

			Industr		Total supply		
		Agricul- Manufact. and Services ture Construction		Total			Imports
	Agriculture	270	30	50	350	20	370
"	Manufacturing	6	380	87	473	42	515
ncts	Construction	4	50	13	67	8	75
Prod	Trade, transport and communication	10	15	210	235	7	242
4	Finance and business services	6	17	240	263	11	274
	Other services	4	8	100	112	12	124
	Total		500	700	1 500	100	1 600

## Main identities (3) GVA production = GVA income

Output-Intermediate consumption = Compensation of employees + Gross operating surplus + Other taxes/subsidies on production

For industry 'Agriculture':

300-210 = 90

= 50 + 40

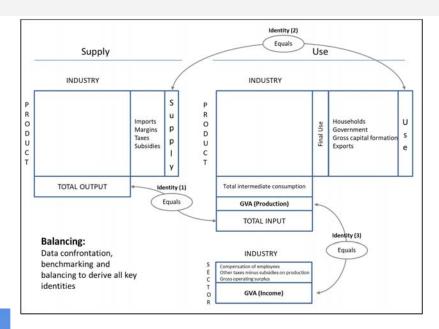
#### Use table

U	ise table								
			Industr	ies		F			
		Agricul- ture	Manufact. and Construction	Services	Total	Final consumption expenditure	Gross capital formation	Exports	Total use
	Agriculture	34	59	93	186	131	21	32	370
"	Manufacturing	97	107	57	261	122	73	59	515
roducts	Construction	9	12	4	25	17	30	3	75
rod	Trade, transport and communication	42	24	11	77	140	20	5	242
۵	Finance and business services	14	53	42	109	116	31	18	274
	Other services	14	35	22	71	35	10	8	124
	Total	210	290	229	729	561	185	125	1 600
	GVA (	90	210	471	771	D			
	Compensation of employees	50	120	200	370				
	Operating surplus / Mixed income	30	60	171	261				
	Other Taxes less subsidies on production	10	30	100	140				
	Total	300	500	700	1 500				



# Summary of the main identities





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## Benefits of SUTs







## Benefits of SUTs



### Statistical benefits

Provide an integrated framework for checking consistency and completeness of data Provide a balancing framework that reconciles GDP calculation via the expenditure, income and production approaches

Benchmark national accounts:

- Exhaustive and complete coverage
- Make the best use of all available data
- Correct for coverage and other data source issues
- Produce three coherent measure of GDP

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## Benefits of SUTs



## Analytical benefits

Show the links between domestic industries, plus links to imports and exports, thus enabling important studies of economic policy

Provide the first 'product' view of interactions within the economy

## Benefits of SUTs

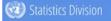


## Policy benefits

### **Economic analyses**

### Impact and policy analyses

- Export shares
- Import penetration
- Concentration ratios
- Links between prices and costs
- Links between energy production consumption and emissions, etc.
- Sensitivity analyses and impacts of taxation changes
- Price changes
- Introduction of a min. wage
- Specific economic crisis, earthquakes, etc.
- Consumption/demand based accounting and analyses of air emissions, material flows, energy, water, etc.



## Benefits of SUTs



## Policy benefits

### Industrial and sectoral analyses

#### Other

- Changes to specific sectors over time like ICT, oil and gas, food, sport, creative sector, tourism, health, etc.,
- Analyses covering the digital economy, sharing economy and collaborative economy
- Product-specific global value chains.
- Computable general equilibrium (CGE) models,
- Environmental analyses,
- Supply-side based models, etc.

## Reference





https://unstats.un.org/unsd/nationalaccount/docs/SUT\_IOT\_HB\_wc.pdf

