# Trade in Value added and Global Value Chain

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## What is the role of services in GVCs?

- 1. Services as inputs or enablers in manufacturing
  - Services embodied in goods, or "Servicification of manufacturing"



- 2. Services as inputs in fragmented services production
  - Services value chains or services networks

## Servicifi...what?

"Servicification" means that manufacturing firms:

1. <u>buy</u> and <u>produce</u> internally increasingly more services



30 services are required to get a loaf of bread into a shopping basket, accounting for 72% of the final price



## More servicification

"Servicification" means that manufacturing firms:

2. <u>Sell</u> and <u>export</u> increasingly more services

Sandvik



... and <u>15 types of services</u> (from R&D to maintenance of delivered products) Rolls Royce



... generates **52%**of its civil aircraft **revenue** from **after-sale services** 

## The film value chain

#### Production

#### Distribution

#### Pre-production

Novel (Yann Martel)
Screenplay (David Magee)
Director (Ang Lee)
Casting Director (1)
Casting Department (19)
Casting of film locations (India, Chinese Taipei, New Zealand, Canada)
Producers (12)

Budget is prepared (US\$120 million)

#### Production

Cast (42)

Stunts (9)

Second Unit Directors or Assistant Directors (18)

Production Designer (1)

Art Directors (2)

Set Decorators (2)

Art Department (105, e.g. construction coordinator, painter, plasterer, set designer, art director, set decorator, storyboard artist, carpenter, illustrator, sculptor, translator)
Cinematographer (1)

Camera and Electrical Department (156)

Production Management (21)

Costume Designer (1)

Costume and Wardrobe Department (19)

Make-Up Department (15)

Sound Department (50)

Transportation Department (44)

Miscellaneous Crew (243)

#### Post-production

Composer (1) Editor (1)

Editorial Department (34)

Animation Department (2)

Music Department (58)

Special Effects (66)

Visual Effects (1158, e.g.

digitial/graphic/visual/ effects artists, match movers, mattee painters, texture painters, compositors, lighters, stereo 3D producers/quality controlers)

#### Distribution

Cinema (box office: US\$609 millions)

DVD/Blu-ray

Television

Video on demand (VOD)

Internet download

Distributed by 20th Century Fox (and subsidiaries) in most countries.

## Take a holistic view on how services are traded

- Direct cross-border services trade (GATS mode 1)
- Movement of consumers (mode 2) and labour (mode 4)
  - Measured by balance of payments (BOP)
- Movement of capital (mode 3)
  - Measured by foreign affiliate statistics (FATS)
- Indirect services trade (embodied in goods)
  - Measured by trade in value added statistics (international input-output tables)
  - Domestic versus foreign value added content of exports

### Inter-Country Input-Output (ICIO) database

National Input-Output tables (IOTs) or Supply and Use tables (SUTs)

Bilateral trade statistics in goods and services

Countries



Countries, WTO (estimations, adjustments)



		Country A			Country B			Country C			Final Demand		
		Sector 1	Sector 2	Sector 3	Sector 1	Sector 2	Sector 3	Sector 1	Sector 2	Sector 3	Country A	Country B C	ountry C
Country A	Sector 1												
	Sector 2												
	Sector 3												
Country B	Sector 1	_		_					TOT	$\sim$			
	Sector 2 Sector 3  Inter-C	011	ntr	(7 ln	1011	_( )1	1117	11† (	$\mathbf{I}$	( )	ahl	6	
	Sector 3	<sub>t</sub> ou	TILL	у тті	Pu		utp	$\alpha \iota$		$\mathcal{O}_{\mathcal{I}}$			
Country C	Sector 1												
	Sector 2												
	Sector 3												
Taxes less subsidies on products													
Cif-fob adjustments													
Value added	Labour compensation												
	Operating surplus												
	Taxes less subsidies on production												
Output											1		



## Domestic and foreign sectoral VA contributions to EU28 exports, 2011

(% share in industry's total gross exports)

#### Value added origin ↓

	Domestic			Foreign	Total		
	Primary products	Manufactures	Services	Primary products	Manufactures	Services	
Total, of which:	2.8	25.2	43.4	5.0	8.8	14.9	100.0
Primary products	55.2	5.9	18.2	5.8	5.1	9.8	100.0
Manufactures	1.9	39.4	23.1	6.6	12.2	16.8	100.0
Services	0.6	3.6	78.0	2.2	3.5	12.1	100.0

Export industry

Source: OECD-WTO TiVA database



# Structure of world exports in VA terms, 2011

