

# **Implementation of System of National Accounts 2008 in Hong Kong, China**

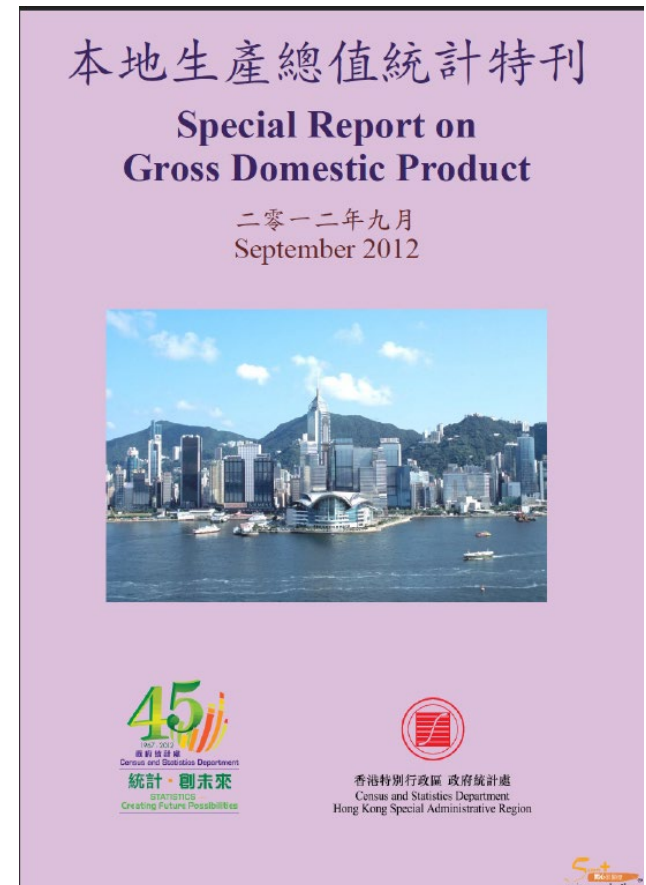
**SIAP-2008 SNA webinar  
(22-23 February 2023)**

# Outline

- Implementation of System of National Accounts 2008 (2008 SNA) – an overview
- Highlights of the implementation in 2012
  - Capitalisation of research and development expenditure
    - Methods, data sources and results
  - Adoption of change of ownership principle in Hong Kong
    - Recording of outward processing and merchanting
    - Data collection
    - Analysis of Hong Kong's trade statistics under the change of ownership principle

# Implementation of 2008 SNA – an overview

- In September 2012, Hong Kong implemented the latest international statistical standards presented in the 2008 SNA and incorporated the enhanced estimation methods into the GDP compilation framework.
- Details of this implementation are published in the [Special Report on Gross Domestic Product](https://www.censtatd.gov.hk/en/data/stat_report/product/B1030003/att/B10300032012XXXXB0100.pdf).  
([https://www.censtatd.gov.hk/en/data/stat\\_report/product/B1030003/att/B10300032012XXXXB0100.pdf](https://www.censtatd.gov.hk/en/data/stat_report/product/B1030003/att/B10300032012XXXXB0100.pdf))



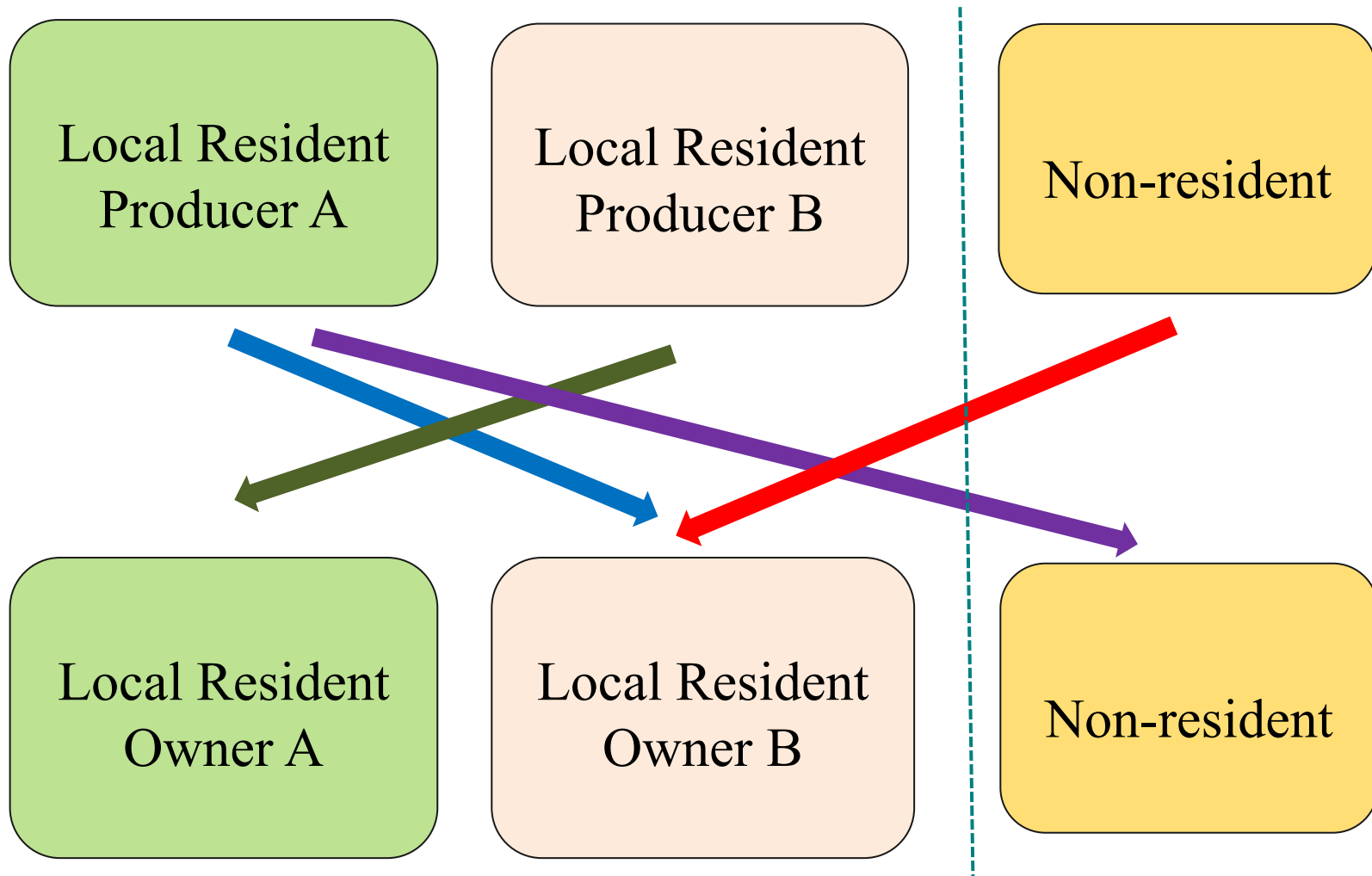
# Implementation of 2008 SNA – an overview

- New standards implemented in 2012 include:
  1. Capitalisation of research and development (R&D) expenditure
  2. Estimating the output of financial intermediation services indirectly measured using the reference rate method
  3. Recording employee stock options as compensation of employees
  4. Adoption of the change of ownership principle in recording goods sent abroad for processing and merchanting
  5. Adoption of new classification and enhanced estimation methods for relevant categories of trade in services statistics

# Capitalisation of research and development expenditure

- The 2008 SNA recommends recording R&D expenditure as capital formation so as to better reflect R&D as an economic asset which provides impetus to economic growth and development.
- In national accounts, fixed assets are recorded upon acquisition of ownership of the assets by the economies concerned, irrespective of the economies that produce the assets.
- E.g. Imports of R&D are recorded as fixed assets of Hong Kong, offset by imports of services when calculating GDP. On the other hand, exports of R&D is not local asset and is recorded as exports of services.

# Capitalisation of research and development expenditure





# Capitalisation of research and development expenditure

- Since R&D activities are usually undertaken by establishments in-house as own-account production, the 2008 SNA recommends that the value of such R&D output should be estimated based on the sum of costs.
- Treatment of R&D expenditure:
  - Own-account production of R&D
  - R&D purchased from other organisations
  - the above two items are included in gross domestic fixed capital formation

# Capitalisation of research and development expenditure

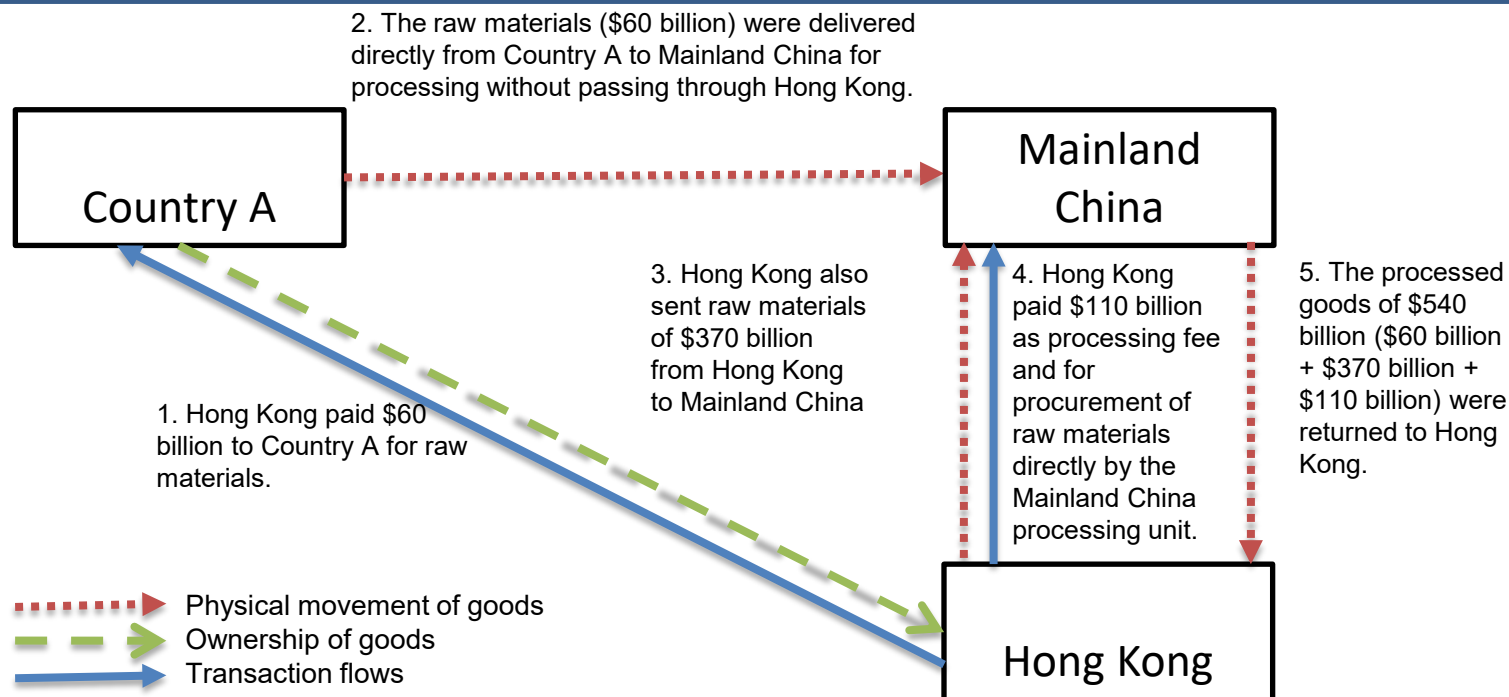
- Data sources:
  - Annual Survey of Innovation Activities
    - covers major industry groups including manufacturing; construction; distributive trades; transport and storage; information and communications; financing, insurance, professional and business services
  - Annual Survey of Imports and Exports of Services
  - Special enquiries on R&D expenditure to government departments and universities



# Adoption of change of ownership principle

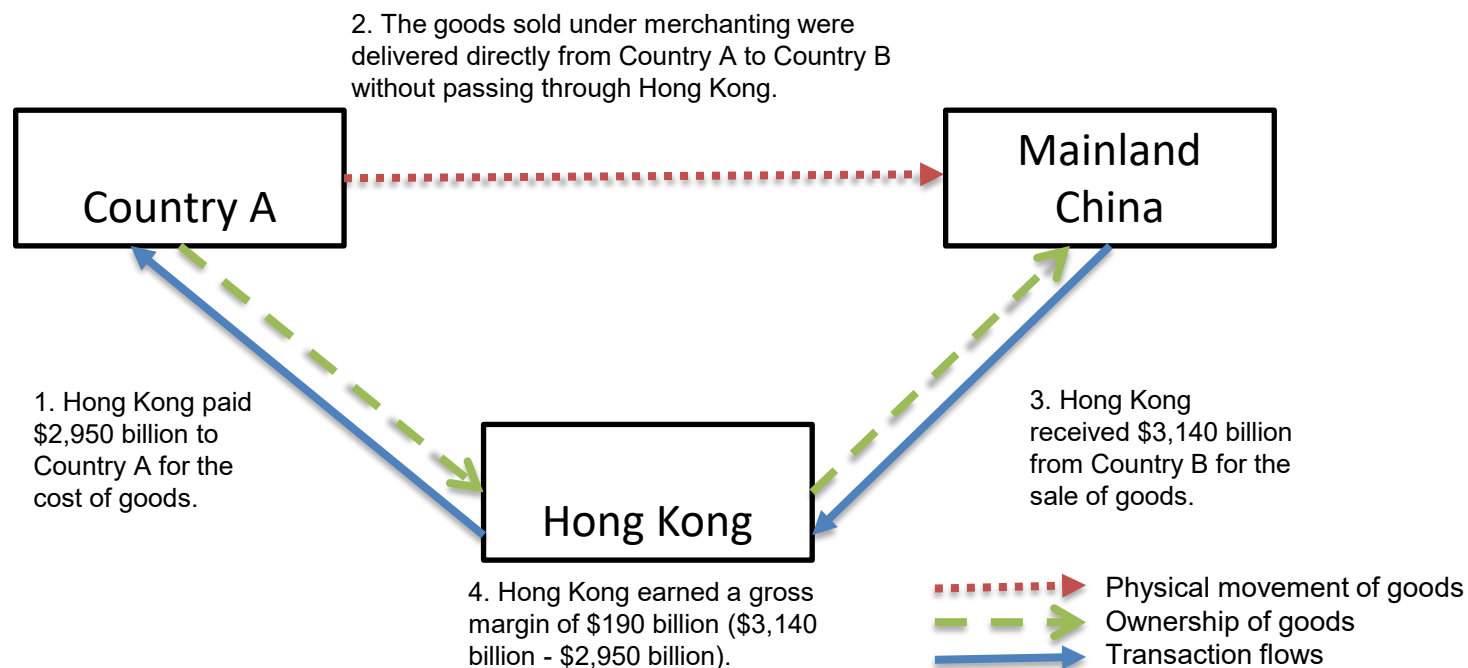
- Under the 1993 SNA, imports and exports of goods are recorded at the time they crossed the boundary of Hong Kong
- Under the new standards stipulated in the 2008 SNA, the change of ownership principle is adopted in recording trade in goods and services in national accounts.
- The new standards are crucial since Hong Kong has a significant amount of outward processing activities in the Mainland China since 1990s.
  - About 33% of imports of goods from Mainland China were related to goods returned after processing in 2021.

# Recording of outward processing



1993 SNA			2008 SNA		
	Exports	Imports		Exports	Imports
<b>Goods</b>	370	540	<b>Goods</b>		60
			<b>Services</b>		
			Manufacturing services		110
<b>Balance of trade</b>	-170		<b>Balance of trade</b>	-170	

# Recording of merchunting



1993 SNA			2008 SNA		
	Exports	Imports		Exports	Imports
			<b>Goods</b>		
			Net exports of goods under merchunting	190	
<b>Services</b>					
Merchanting services	190				
<b>Balance of trade</b>	+190		<b>Balance of trade</b>	+190	

# Data Collection

## (a) Outward processing

- Enhance the existing survey (Monthly Survey on Trade Involving Outward Processing in the Mainland of China) since the second quarter of 2008 to collect additional data to meet new data requirements
- Enlarge the quarterly sample size of the survey

## (b) Merchanting and

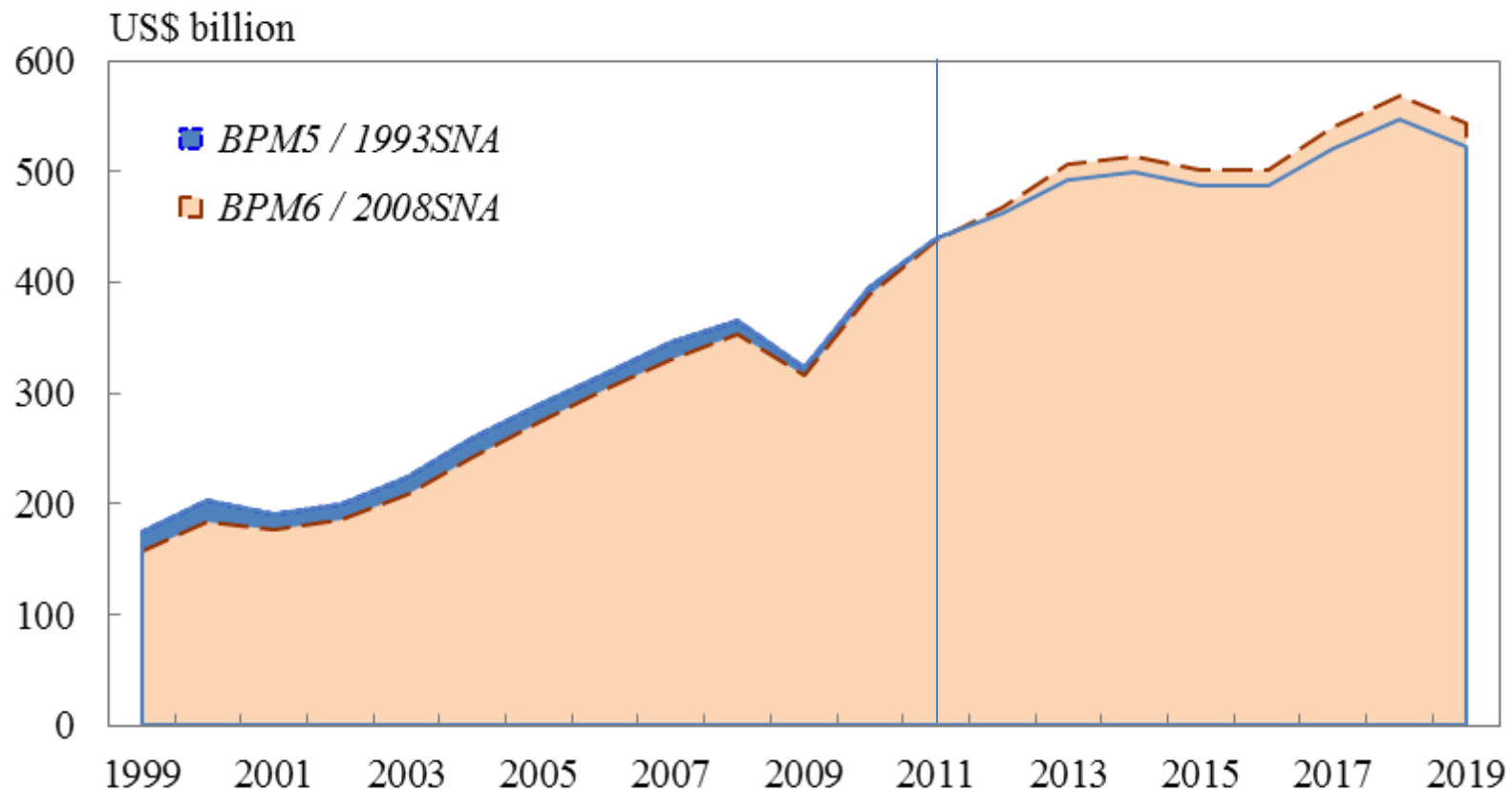
## (c) offshore trade activities involving outward processing

- A new survey has been introduced to collect additional data at quarterly intervals since the first quarter of 2010
- To be more cost-effective, industry-specific questionnaires have been adapted since the first quarter of 2011

# Analysis of Hong Kong's trade statistics under the change of ownership principle

- The value of total exports of goods compiled using the new principle was higher than that compiled using the old principle only since 2012.

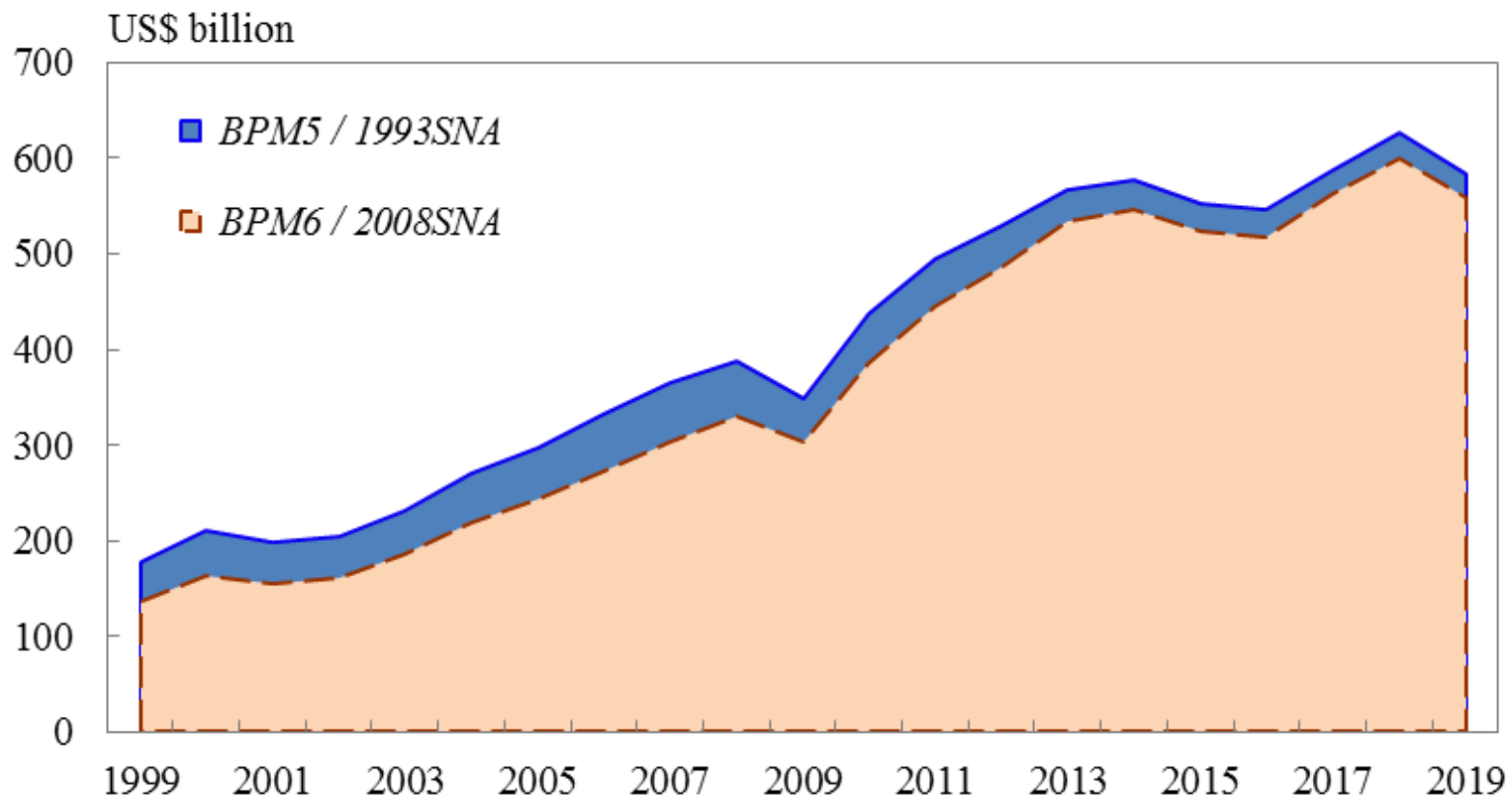
Exports of goods compiled using the old and new principles



# Analysis of Hong Kong's trade statistics under the change of ownership principle

- The value of total imports of goods compiled using the new principle was all along smaller than that compiled using the old principle.

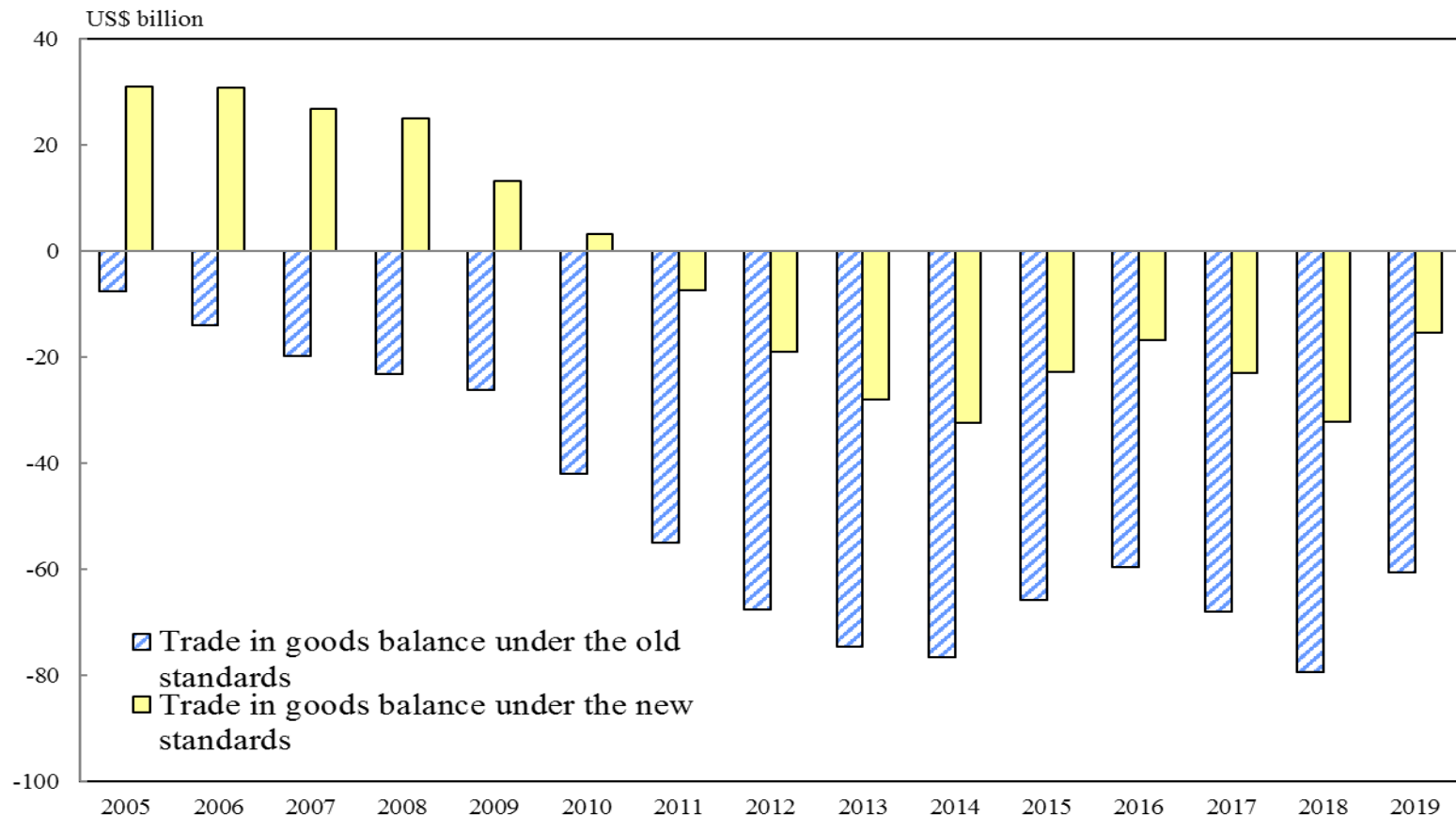
Imports of goods compiled using the old and new principles



# Analysis of Hong Kong's trade statistics under the change of ownership principle

- The balance of trade in goods of Hong Kong generally exhibited a structural change from deficit to surplus or lower deficit.

**Balance of trade in goods compiled using the old and new principles**



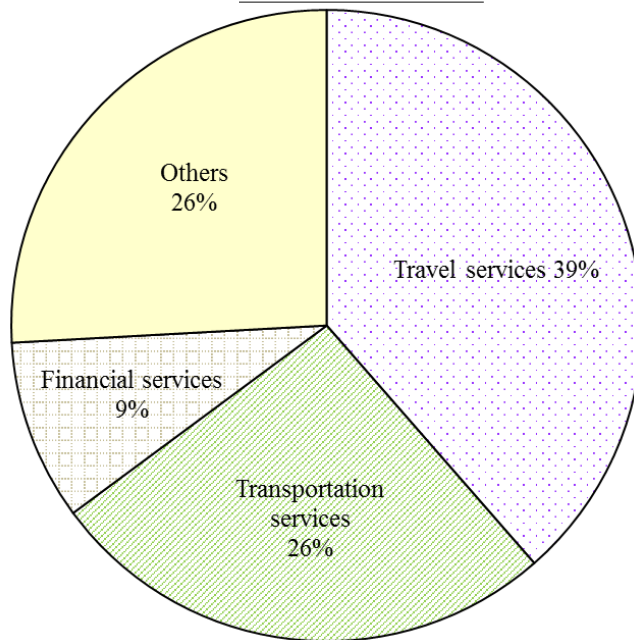


# Impact on trade in services statistics

- Under the new principle, Hong Kong imported a substantial amount of manufacturing services. Imports of services became US\$81 billion, compared with the US\$70 billion compiled using the old principle in 2019.

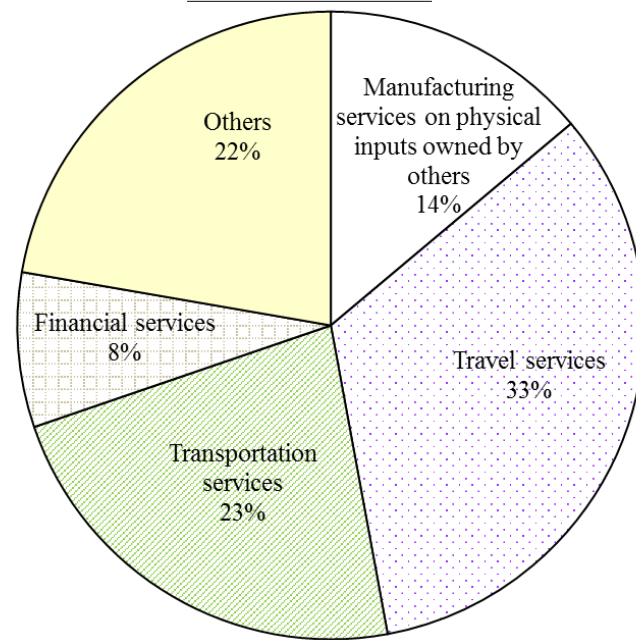
## Imports of services compiled using the old and new principles, 2019

*BPM5 / 1993 SNA*



Total imports of services  
US\$70 billion

*BPM6 / 2008 SNA*



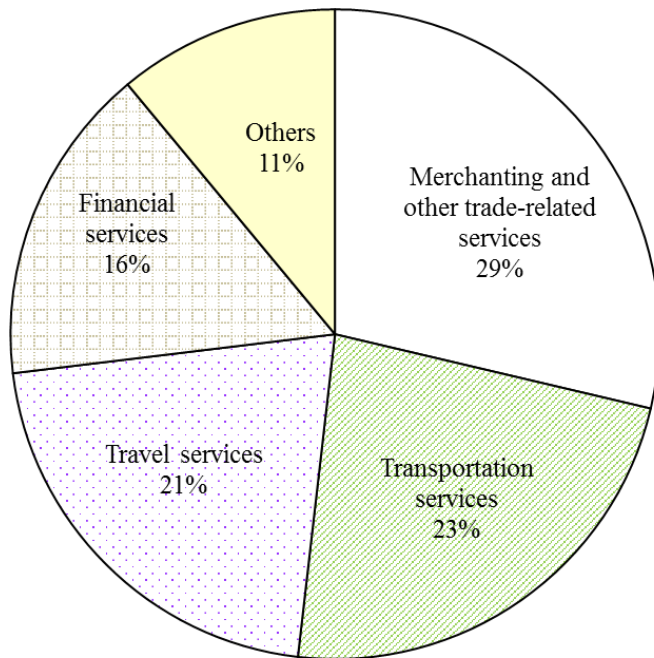
Total imports of services  
US\$81 billion

# Impact on trade in services statistics

- For exports of services, the gross margin of merchanting is taken out under the new principle. Exports of services became US\$102 billion, compared the US\$136 billion compiled using the old principle in 2019.

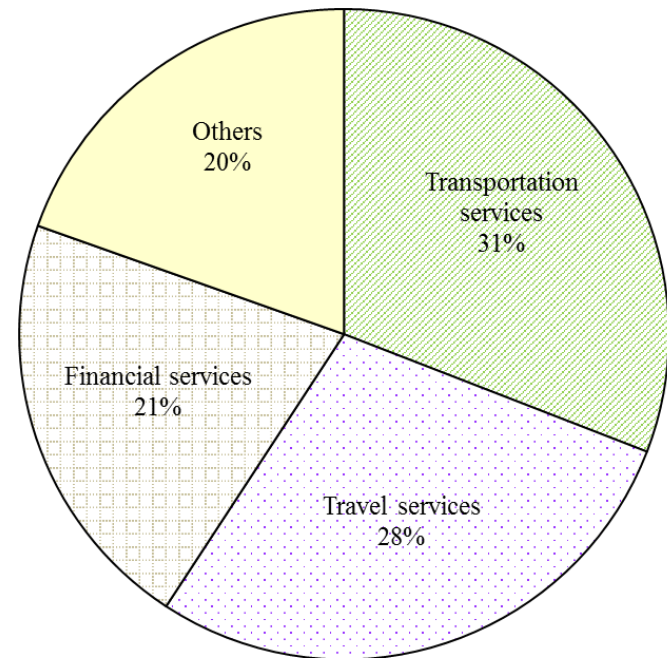
## Exports of services compiled using the old and new principles, 2019

BPM5 / 1993 SNA



Total exports of services  
US\$ 136 billion

BPM6 / 2008 SNA

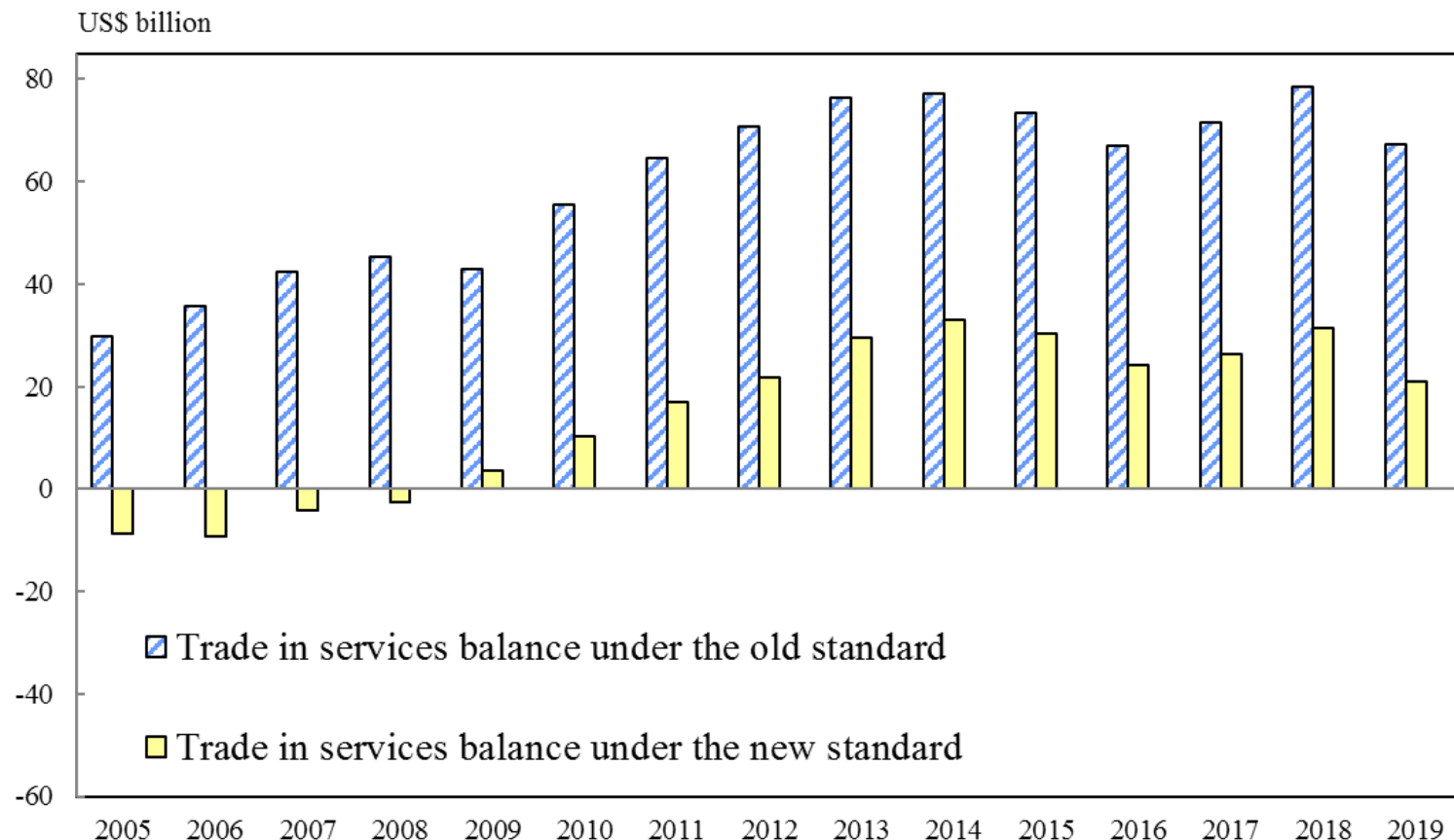


Total exports of services  
US\$102 billion

# Analysis of Hong Kong's trade statistics under the change of ownership principle

- The balance of trade in services of Hong Kong generally exhibited a structural change from surplus to deficit or lower surplus.

**Balance of trade in services compiled using the old and new principles**





# Analysis of Hong Kong's trade statistics under the change of ownership principle

- Only involve reclassification between trade in goods and trade in services
  - No change in overall balance of trade in goods and trade in services
  - No change in GDP



# Dissemination of the new trade statistics

- Some users indicated preference for the provision of a transition period for adapting to the statistics compiled using the new principle.

## From Q3 2012 to Q3 2016

-  Conventional trade statistics continue to be published in the GDP reports.
-  New trade data series based on the change of ownership principle are presented as supplementary tables

## From Q4 2016 to Q4 2019

-  New trade data series based on the change of ownership principle are published in main tables in the GDP reports
-  Conventional trade statistics are presented as supplementary tables

## Since Q1 2020

-  Only the new trade in goods and services figures are published

# Concluding remarks

- Existing surveys have been enhanced / new surveys have been introduced to capture new data required for the implementation of 2008 SNA.
- Maintain close liaison with major data users to ensure smooth transition in disseminating the new series of statistics under the GDP framework.



*Thank You*

The background of the slide features a series of overlapping, wavy lines that create a sense of movement and depth. The colors transition from a vibrant green on the left, through a bright yellow in the center, to a deep blue on the right. The lines are thin and closely spaced, giving the background a textured, almost fabric-like appearance.