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A tentative framework to measure IFFs in illicit drugs market: the Italian case

Expert meeting on statistical methodologies for measuring illicit financial flows (IFFs)
Geneva, 20-22 June 2018

Supply-chain

The supply-chain of a product can be thought of as a sequence of functions to be carried out in different locations

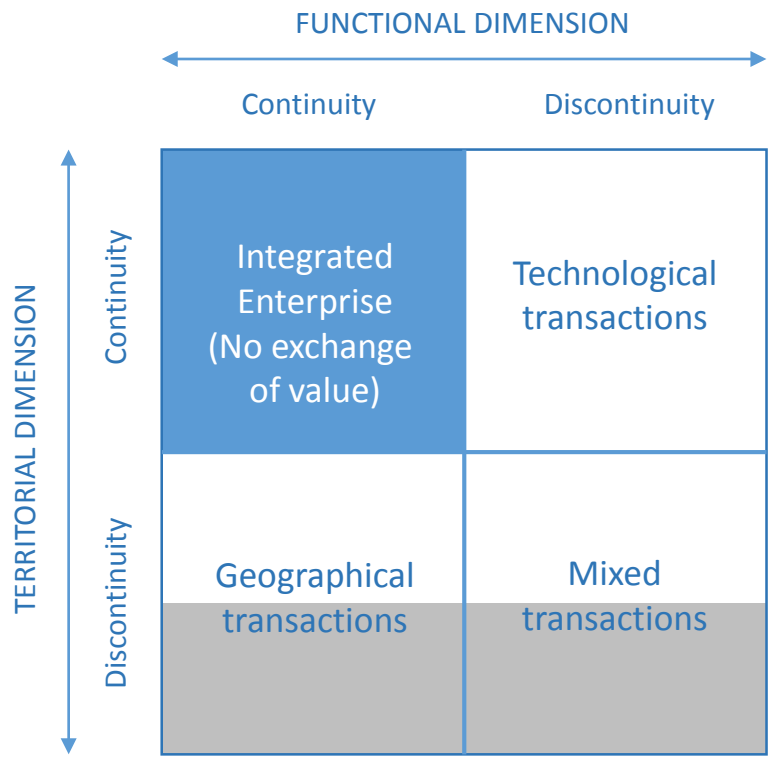
- The sequence of functions is determined according to the given technology of production
- The sequence of locations is determined according to the geographical extension of both the production process and the reference market

Continuity of functions and locations is a necessary condition in order to complete the supply-chain

Potential discontinuities emerge in correspondence to functional and territorial boundaries of productive units, which involve that some functions or locations cannot be internally managed

In order to manage possible discontinuities, transactions (exchange of value, change in ownership) between productive units carrying out different functions and/or operating in different locations emerge

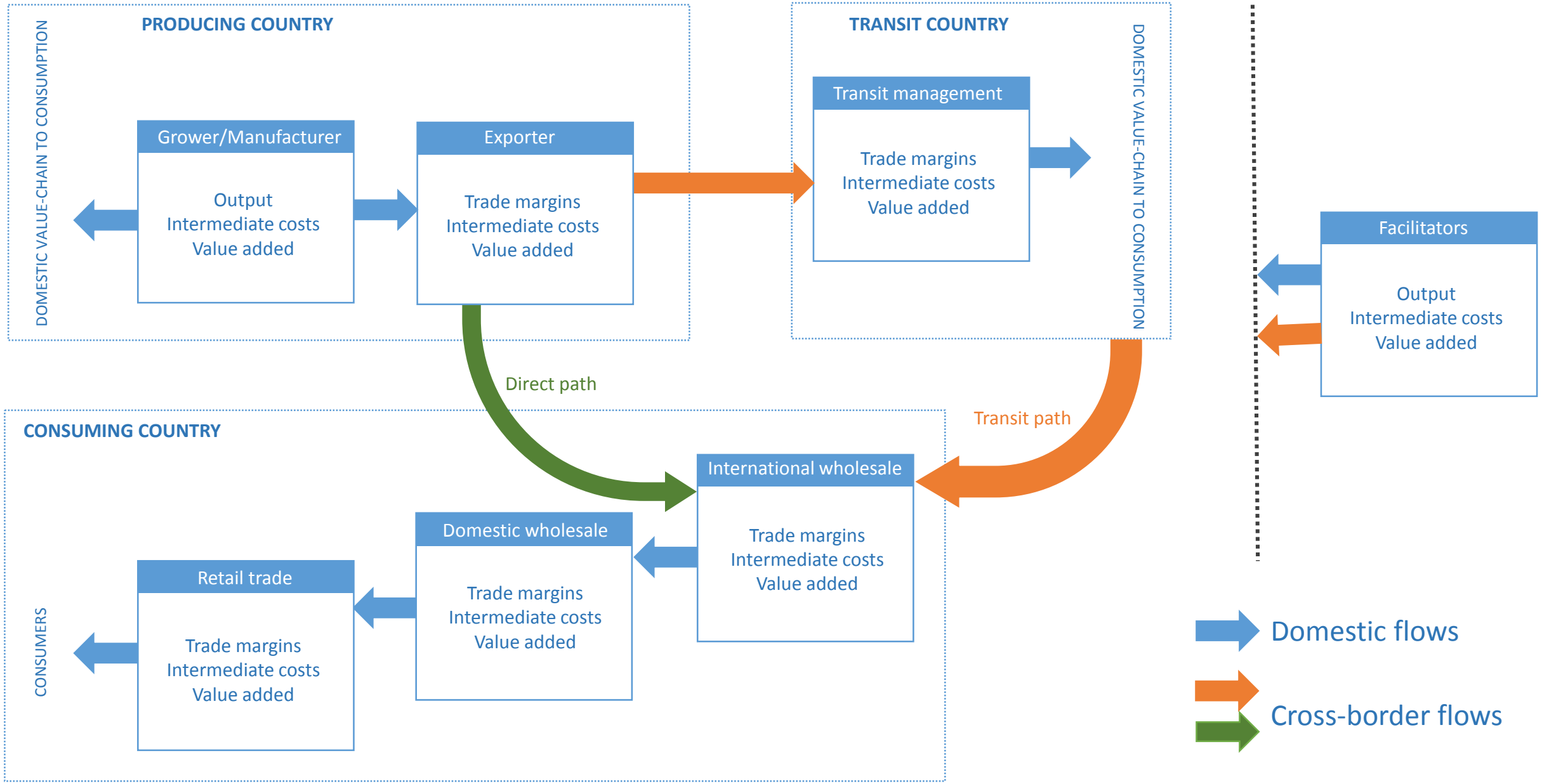
Type of transactions along the supply-chain



Possible cross-border component

- **Integrated enterprise**
  Transaction is internal to the productive unit and there is not exchange of value
- **Technological transactions**
  Transactions between productive units having different functions along the value-chain but same location
- **Geographical transactions**
  Transactions between productive units having similar functions along the value-chain but located in different geographical areas
- **Mixed transactions**
  Transactions between productive units having different functions along the value-chain and located in different geographical areas

Conceptualising illicit durgs market



The Italian case: Overview

Italy is considered a consuming country (production is negligible and consumption is higher than exports)

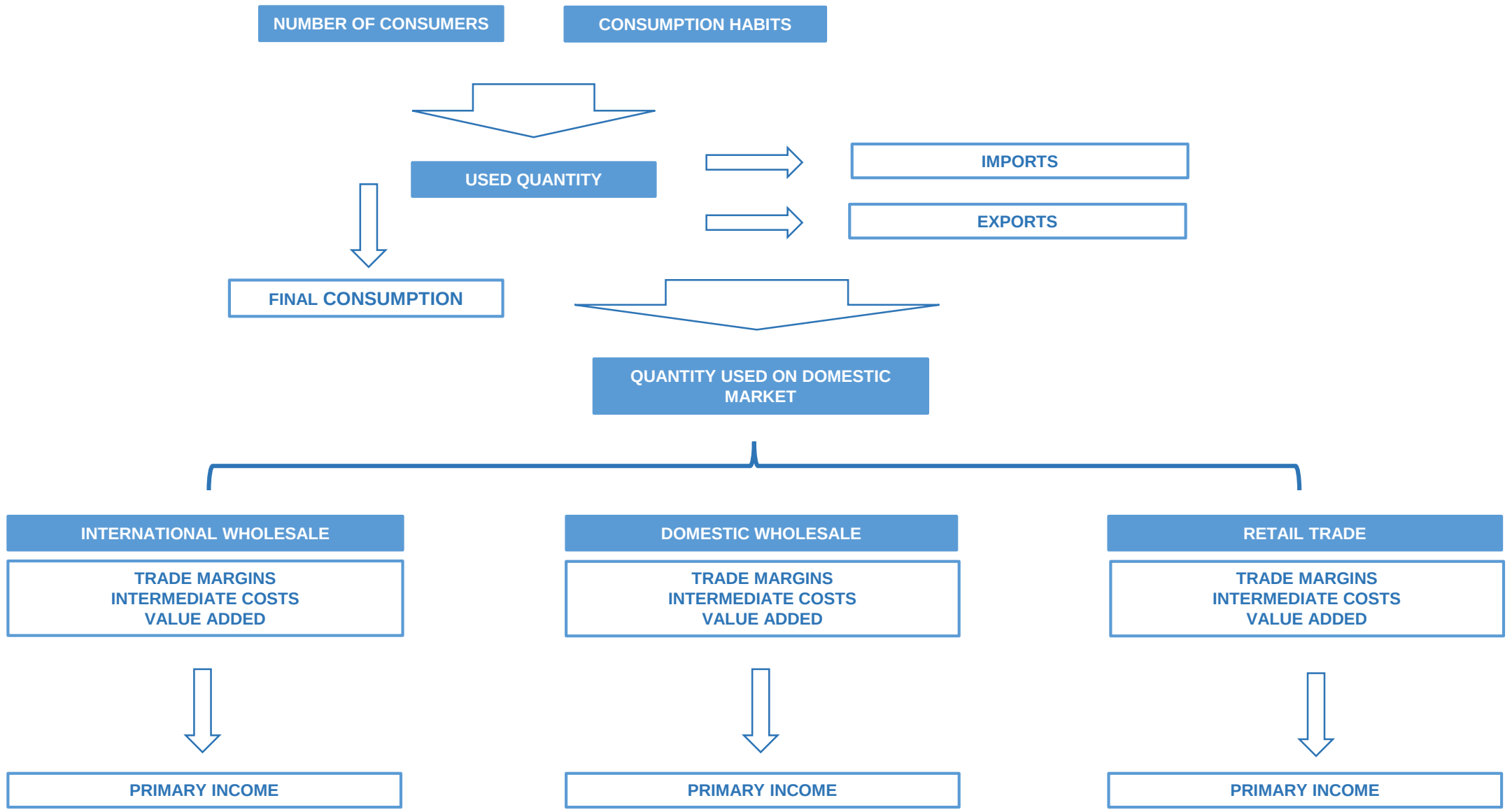
Istat estimtes illicit drug market using a demand-side approach taking into account six types of illicit drugs:

- Heroin
- Cocaine
- Cannabis and derivatives
- Ecstasy
- LSD
- Amphetamines

Informative sources:

- General population survey (number of consumers)
- Case studies (consumption habits)
- Information by experts (incidence and type of intermediate consumption, share of exports)
- Data from seizures (purities)
- Data from contrast authorities (domestic prices)
- International studies and database (international prices)

The Italian case: Measurement framework



The Italian case: Estimation procedure

- Consumed quantity = Number of consumers by type * Number of doses * Quantity per dose
- Final consumption = Consumed quantity * Retail price
- Exported quantity = Consumed quantity * Share of exports
- Exports = Exported quantity * Domestic wholesale price
- Imported quantity = (Consumed quantity * purity) + Exported quantity
- Imports = Imported quantity * Average international price

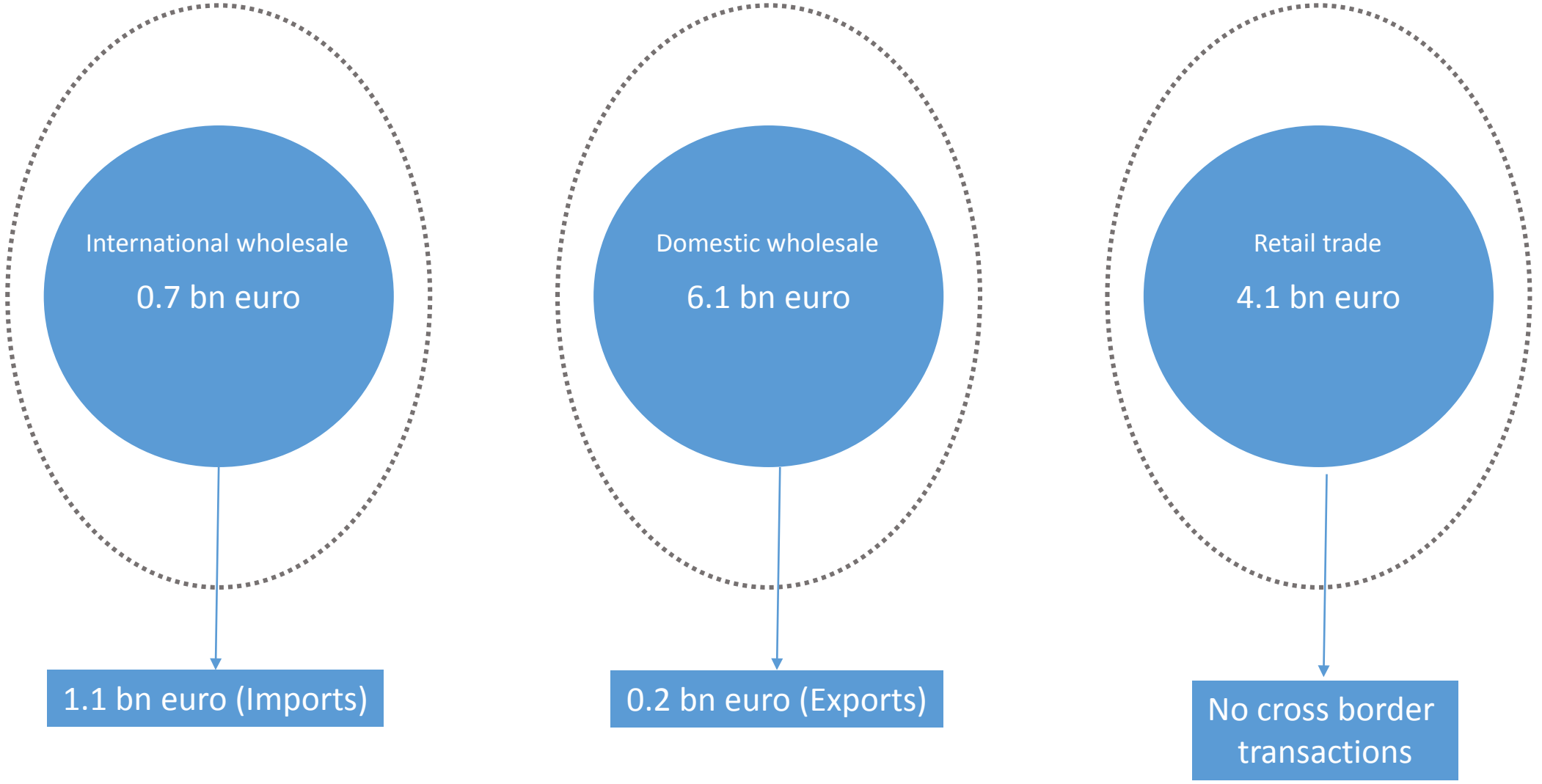
The Italian case: Estimation procedure

Aggregate	International wholesale trade	Domestic wholesale trade	Retail trade
Value of sales	Imported quantity * Domestic wholesale price	Consumed quantity * Retailer price	Consumed quantity * Retailer price
Value of goods to resale	Imported quantity * Average international price	Imported quantity * Domestic wholesale price	Consumed quantity * Retail price
Trade margin	Value of sales - Value of goods to resale	Value of sales - Value of goods to resale	Value of sales - Value of goods to resale
Intermdiate costs			
Transportation	Percentage of turn-over	Percentage of turn-over	Percentage of turn-over
Chemicals	Percentage of turn-over	Percentage of turn-over	Percentage of turn-over
Services	Percentage of turn-over	Percentage of turn-over	Percentage of turn-over
...	Percentage of turn-over	Percentage of turn-over	Percentage of turn-over
Value added	Trade margin - Intermediate costs	Trade margin - Intermediate costs	Trade margin - Intermediate costs

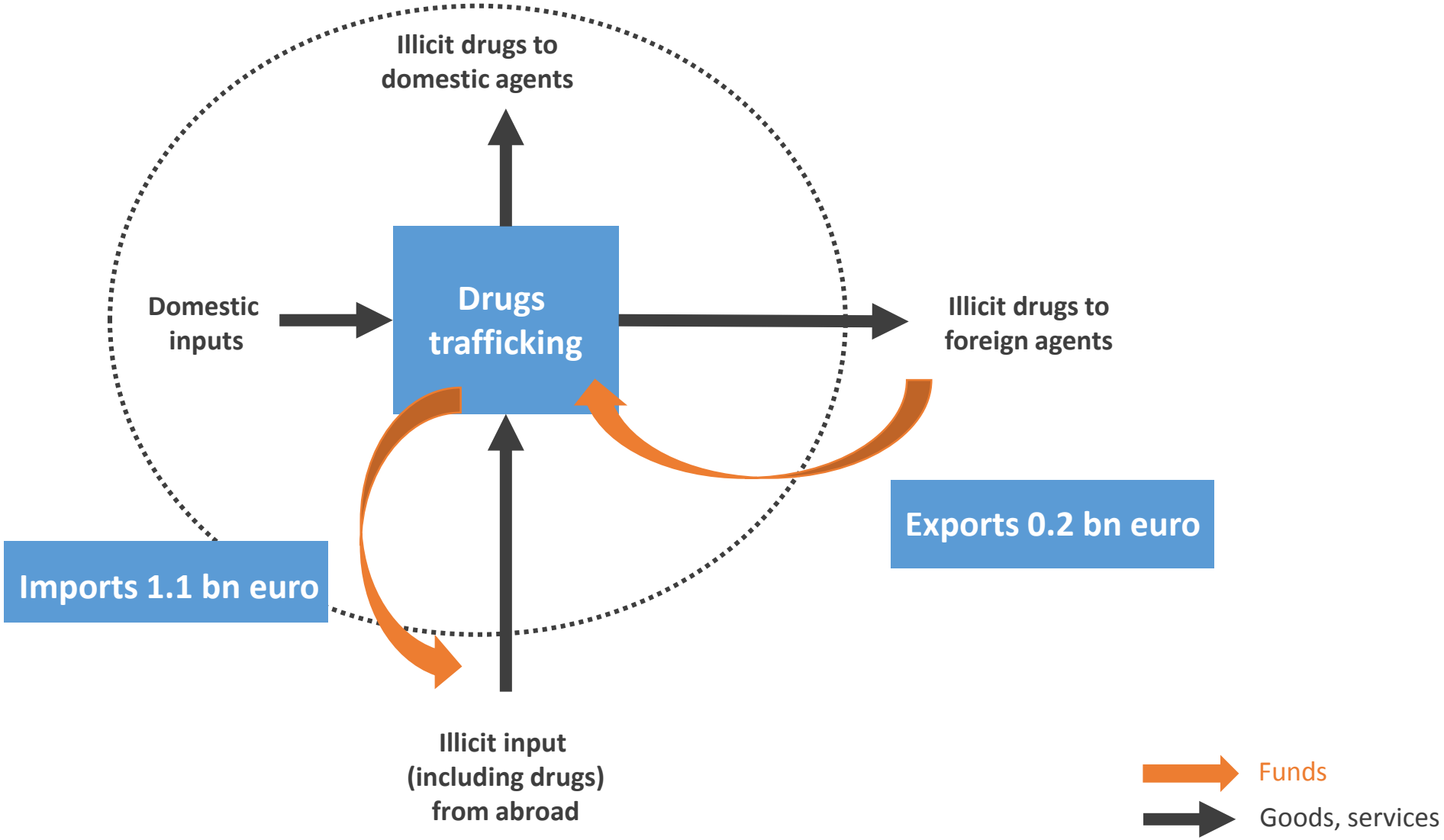
The Italian case: Results

Illicit drugs (2011)	Final Consumption	Imports	Exports	Trade Margins	Intermediate Costs	Value Added
	(Bn euro)	*(Bn euro)*	*(Bn euro)*	*(Bn euro)*	*(Bn euro)*	*(Bn euro)*
Heroin	1.6	0.1	0.0	1.5	0.1	1.4
Cocaine	6.4	0.3	0.1	6.2	0.4	5.7
Cannabis and derivatives	3.4	0.4	0.0	3.0	0.2	2.8
Others	1.3	0.2	-	1.1	0.1	1.0
Total	**12.7**	**1.1**	**0.2**	**11.8**	**0.9**	**10.9**
Induced activities (Facilitators)						0.9

The Italian case: Results



The Italian case: Income generation IFFs



The Italian case: Income management IFFs

Total primary income coming from illicit drugs trafficking amounts to 4.1 bn euro for retailers and 6.8 bn euro for wholesalers and 0.9 bn euro for facilitators

The two types of agents can be supposed to have different behaviours about consumption vs. savings and domestic vs cross border transactions propensities according to the amount of disposable income they have to manage

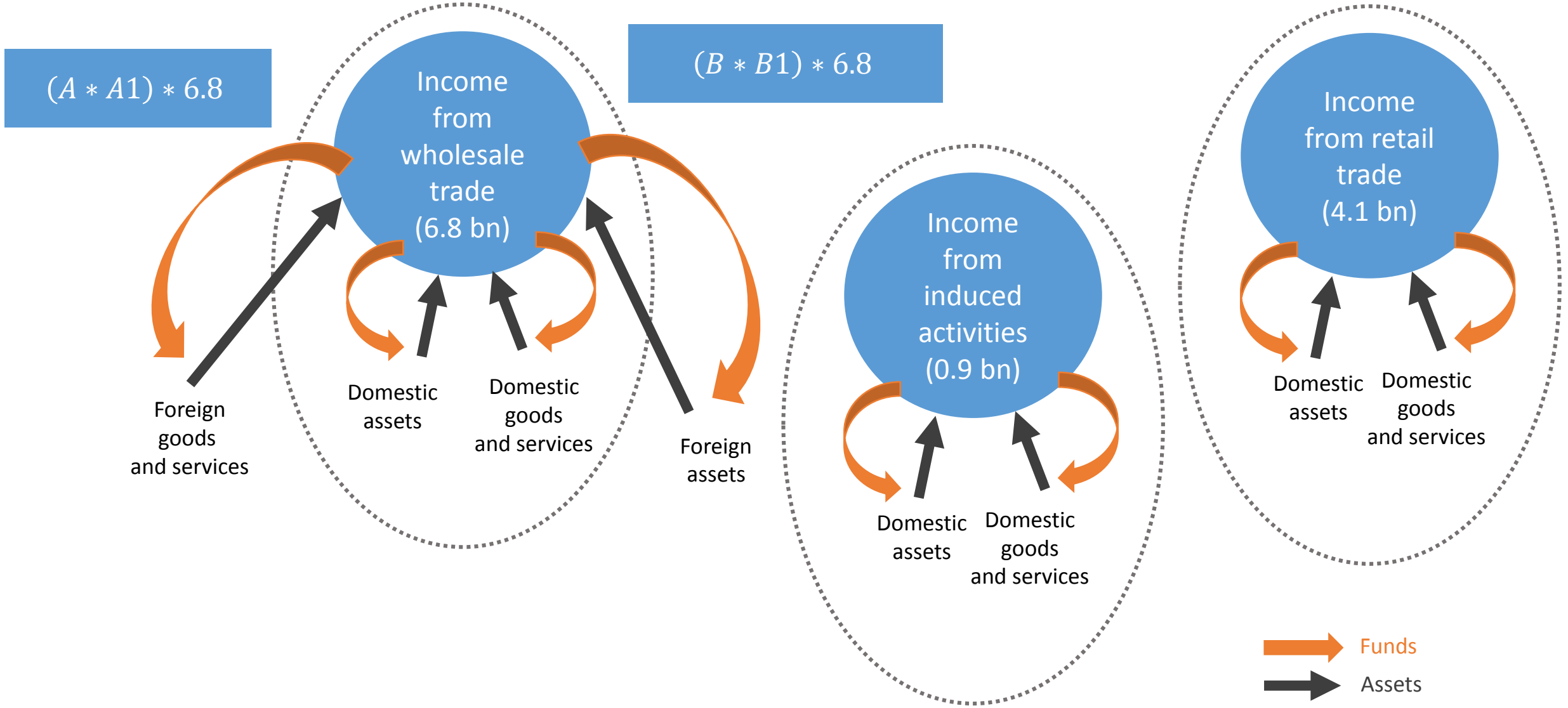
Indicators can be gathered from (they can be also modified using evidences from case studies):

- Official National Accounts data (propensity to consume, propensity to save)
- Official BOP data (domestic vs. cross-border transactions for consumption and investments)

For each type of agent the following indicator matrix can be defined

Prospensity to consume (A)		Propensity to save (B=1-A)	
Imports of goods/services (A1)	Domestic goods and services (1-A1)	Assets from abroad (B1)	Domestic Assets (1-B1)

The Italian case: Income generation IFFs



Thank you.

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