



NACIONES UNIDAS

CEPAL

Seminar on National Accounts for Latin America and the Caribbean:  
Economic Statistics for the Future  
Virtual meeting, Chile - 14-16 Oct 2020



▶ **INTEGRATED ECONOMIC  
STATISTICS  
PROGRESS IN PERU**

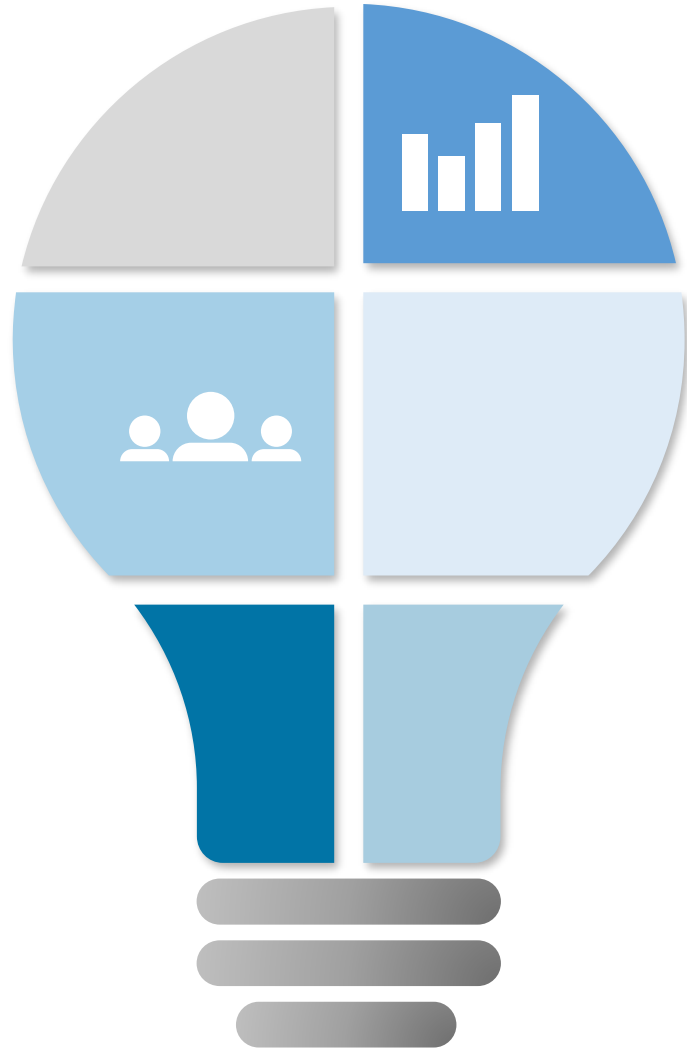
October | 2020

Econ. José Luis Robles

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- 1 General Framework: International Recommendations on Integrated Economic Statistics
- 2 Institutional Context and Regulations in Peru
- 3 Integration of Economic Statistics in National Accounts
- 4 Conclusions



What do we understand by Integrated Economic Statistics?

What are the components for integration?

A look from National Accounts of Peru

# 1. General Framework: International Recommendations on Integrated Economic Statistics



## OBJECTIVE

"Help countries to prepare a set of integrated economic statistics in response to need for a coherent framework to quantify a country's economic activity in an increasingly interconnected world economy."



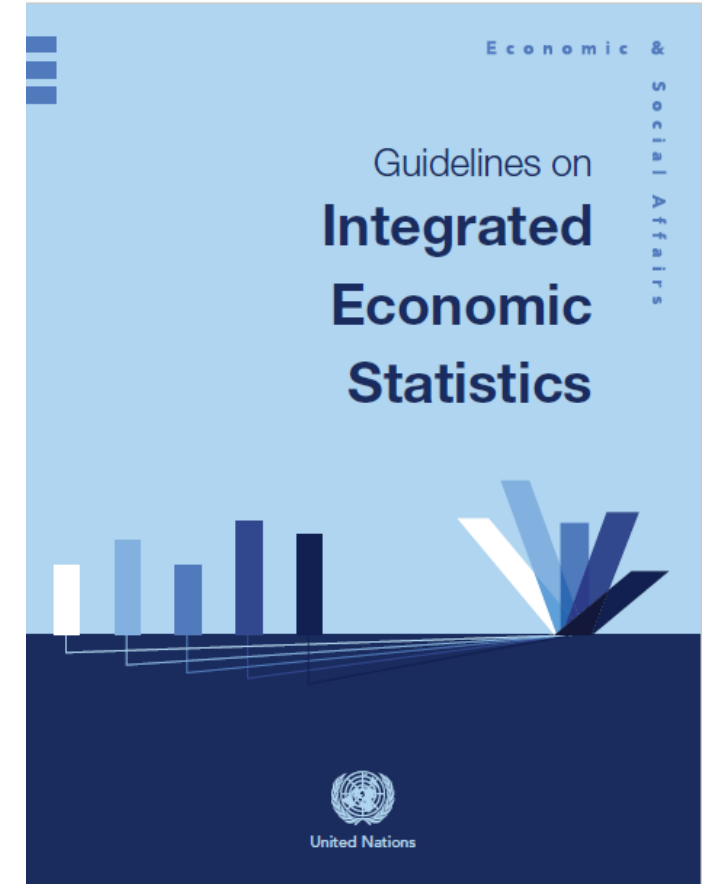
## INTERNATIONAL STANDARDS

System of National Accounts 2008, Balance of Payments Manual 6a. edition and specialized technical manuals: prices, sectoral and trade statistics and foreign direct investment (FDI)



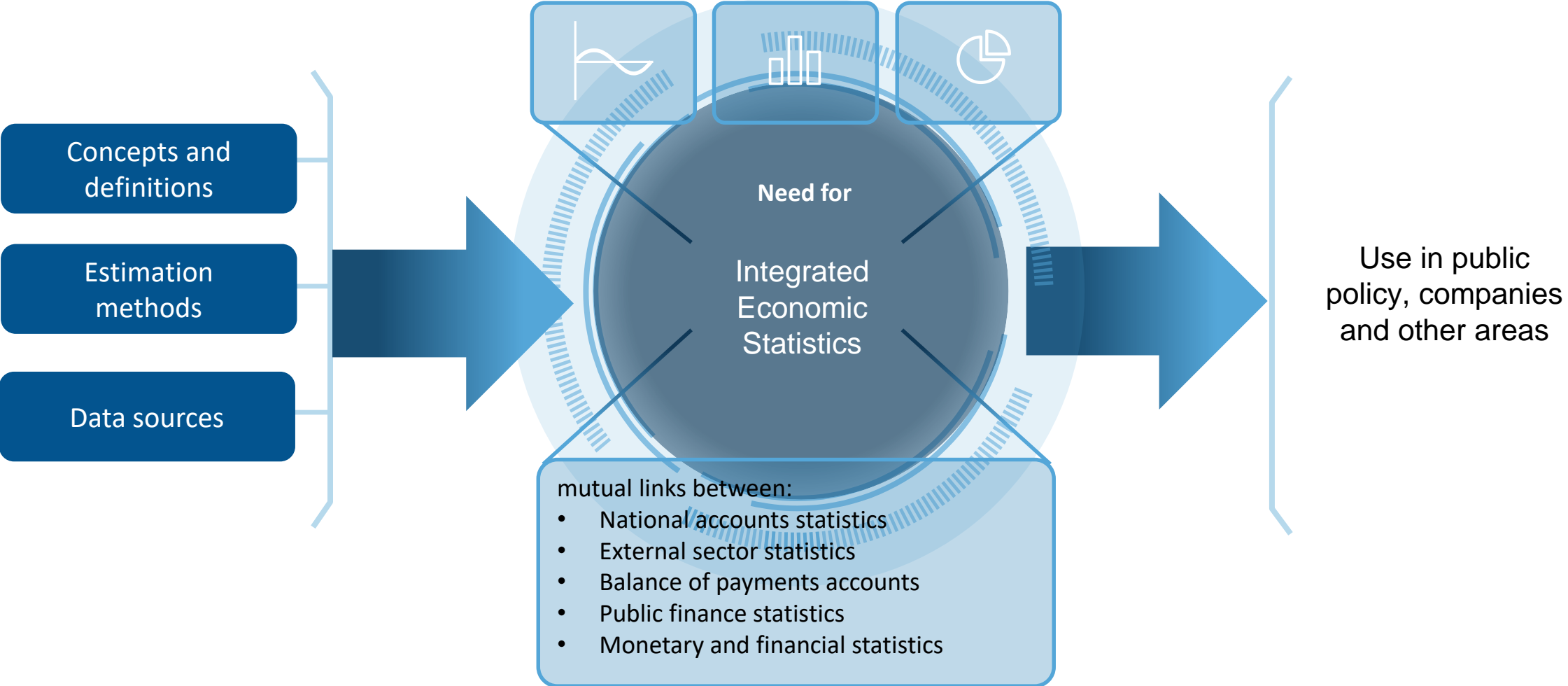
## INTEGRATION

The integration of economic statistics consists of use of common concepts, definitions, estimation methods and data sources for statistical reconciliation.



# 1. General Framework: International Recommendations on Integrated Economic Statistics

## Need for Integrated Economic Statistics



Concepts and definitions

Estimation methods

Data sources

Need for  
Integrated  
Economic  
Statistics





- mutual links between:
- National accounts statistics
  - External sector statistics
  - Balance of payments accounts
  - Public finance statistics
  - Monetary and financial statistics

Use in public policy, companies and other areas

# 1. General Framework: International Recommendations on Integrated Economic Statistics

## Advantages, Challenges and Scope of Integration

### Advantage:

-  Consistency between economic data
-  Transparency and coherence in concepts and definitions  
Greater precision of economic data
-  Greater efficiency in data production
-  Most pertinence statistics

### Challenges:

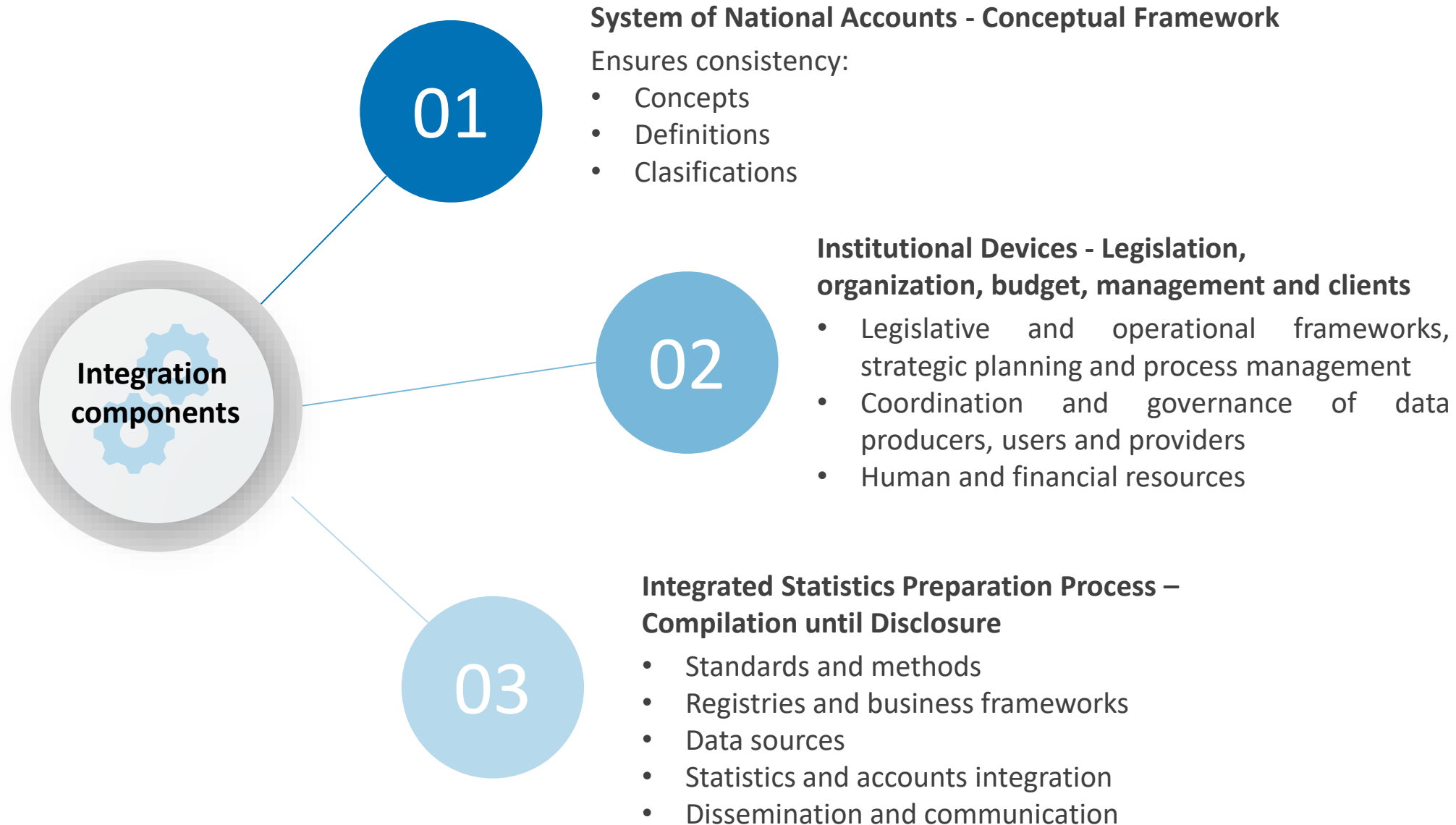
- Getting that statistical units and their classifications are applied in a homogeneous way in all measurements.
- Harmonization with international standards
- Integration of the interdependent components of the statistical production process.
- It involves costs

### Scope of integration:

Statistical reconciliation of diverse primary and secondary statistics — for example, those related to production, income, consumption, employment, and prices — with macroeconomic accounts, such as national accounts.

# 1. General Framework: International Recommendations on Integrated Economic Statistics

## Components for Integration



## 2. Institutional Context and Regulations in Peru



# National Statistical System (NSS)

### Objectives

**Regulate official statistics**

**Coordinate, integrate and rationalize official statistical activities**

**Promote training, research and development of statistical activity**

- **Areas of competence of NSS:** census surveys, continuous statistics, sample surveys, population statistics, indicators and indices in general, National and regional Accounts, macro-statistical schemes, analysis and research.
- It is responsible for technical and scientific tasks that are developed in order to quantify and project economic and social events to produce the official statistics of the country.

#### Decreto Ley 17532

- National Office of Statistics and Censuses (NOSC), attached to the Prime Minister's Office

1969

- #### DL N° 21372
- National Statistical System (NSS)
  - Statistics National Institute

1975

#### Dleg. N° 604

"Law of Organization and Functions of National Institute of Statistics and Informatics."

1990

#### R.S. N°126-71- -EF/43-01

Interinstitutional Technical Commission for National Accounts

1971

#### Decreto Ley 7567

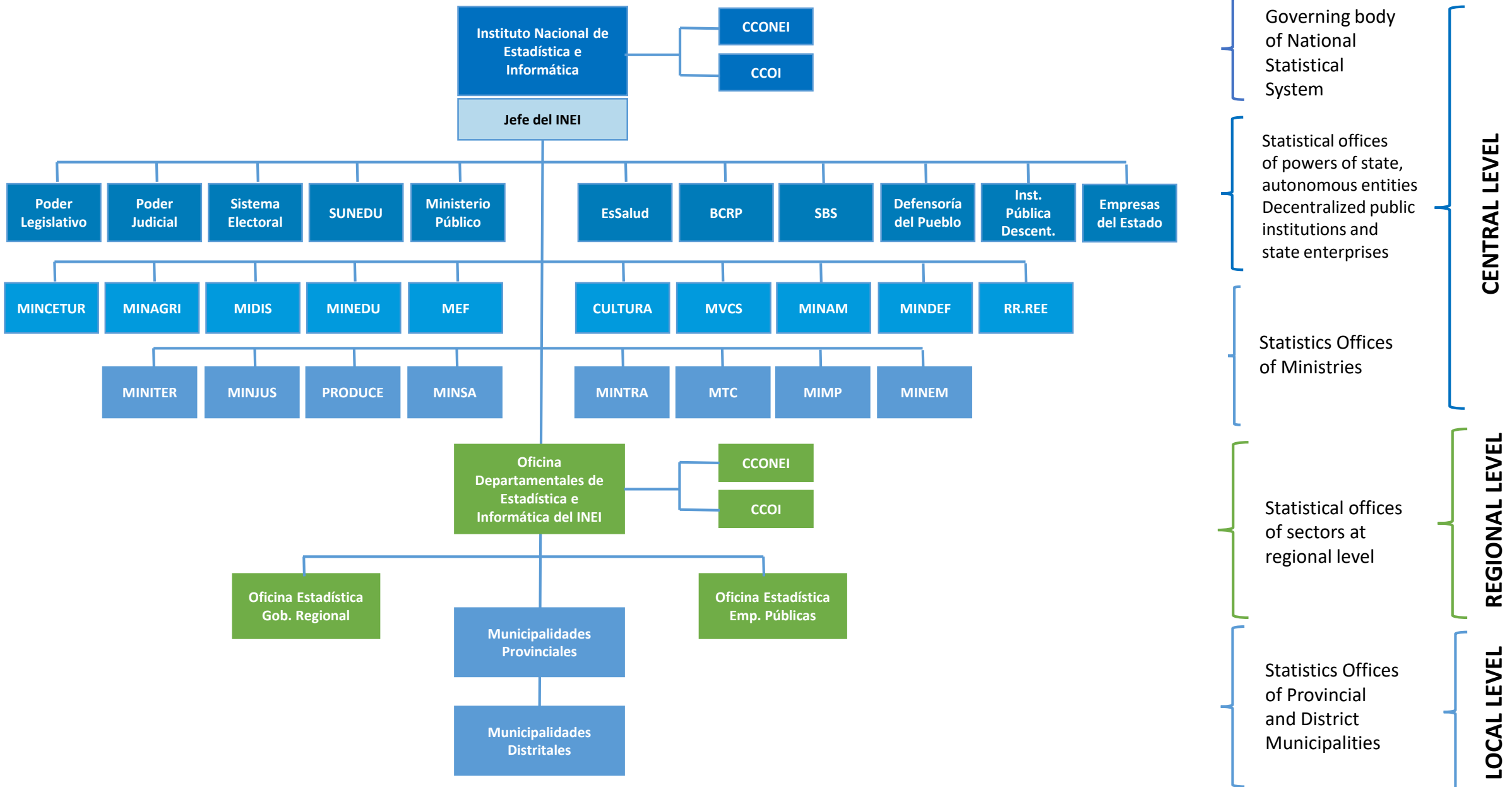
- 1958 National Directorate of Statistics and Censuses
- 1932 National Statistics Office is created

1932



## 2. Institutional Context and Regulations in Peru

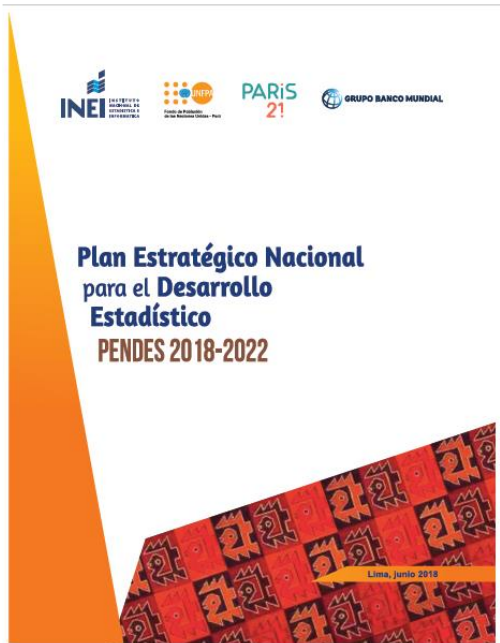
# Organization Chart of National Statistical System



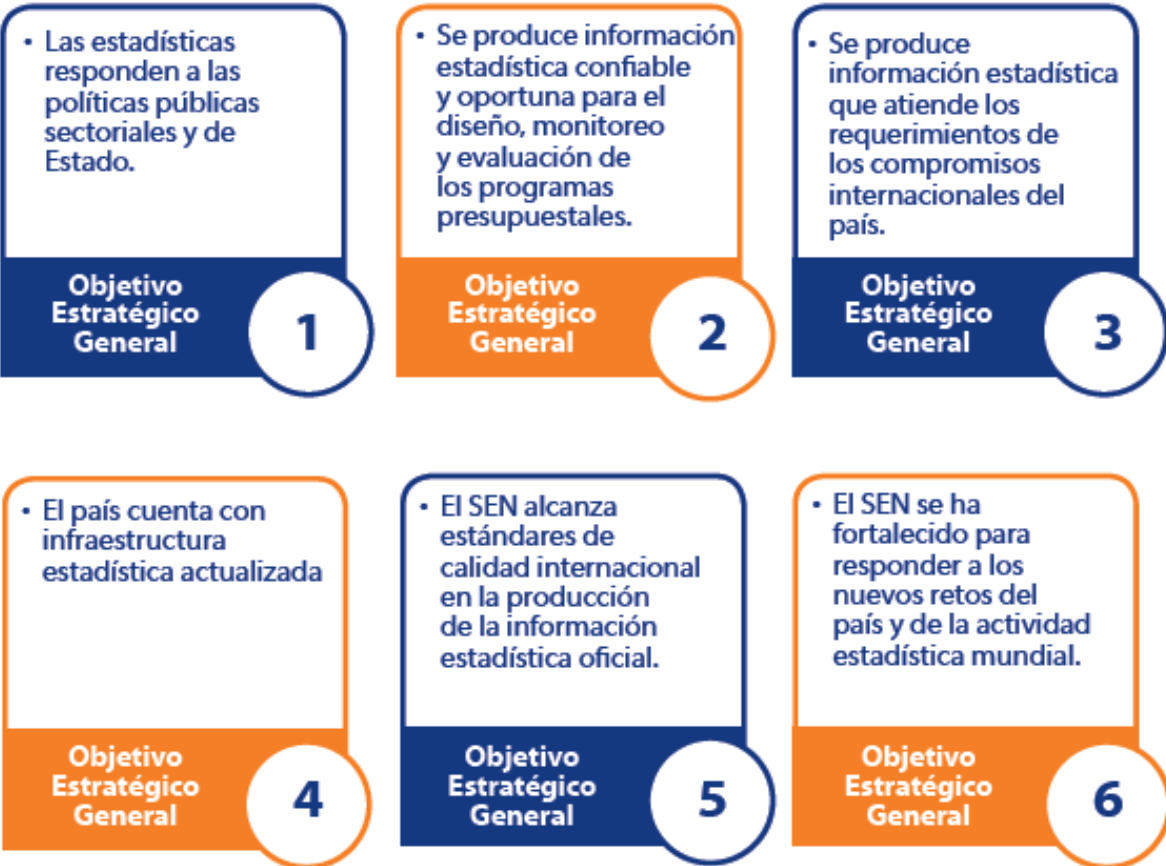
## 2. Institutional Context and Regulations in Peru

### National Strategic Plan for Statistical Development PENDES 2018 – 2022

Sets the course of the National Statistical System (NSS), with the objective of providing reliable, timely and quality statistics to give priority to the design, monitoring and evaluation of public policies.



### Strategic Objectives of PENDES

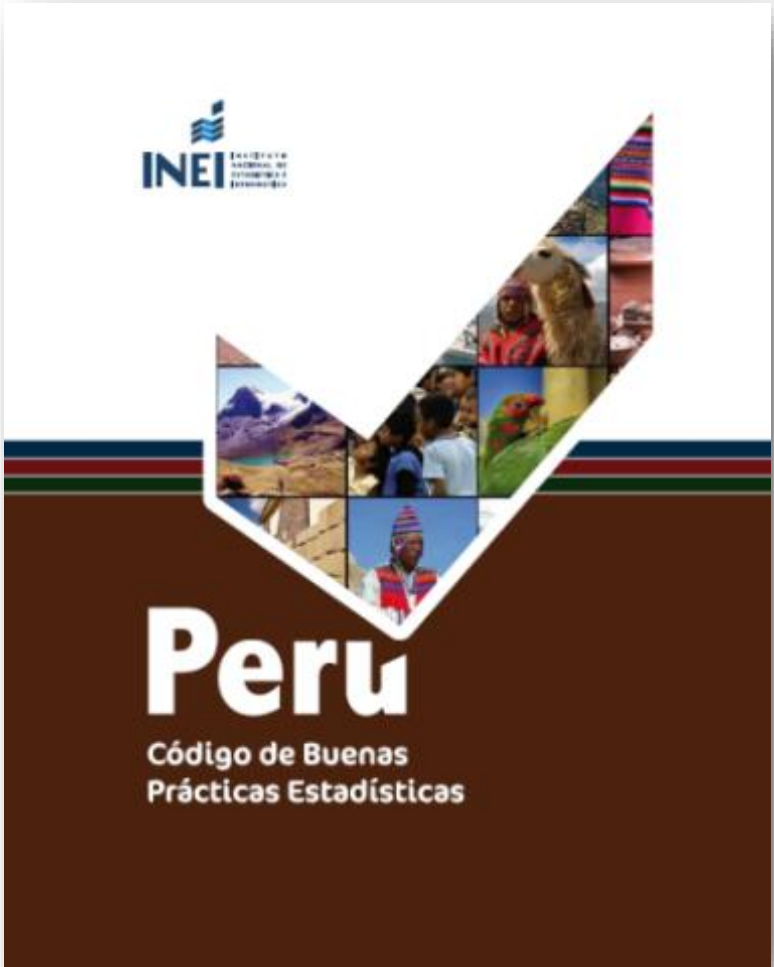
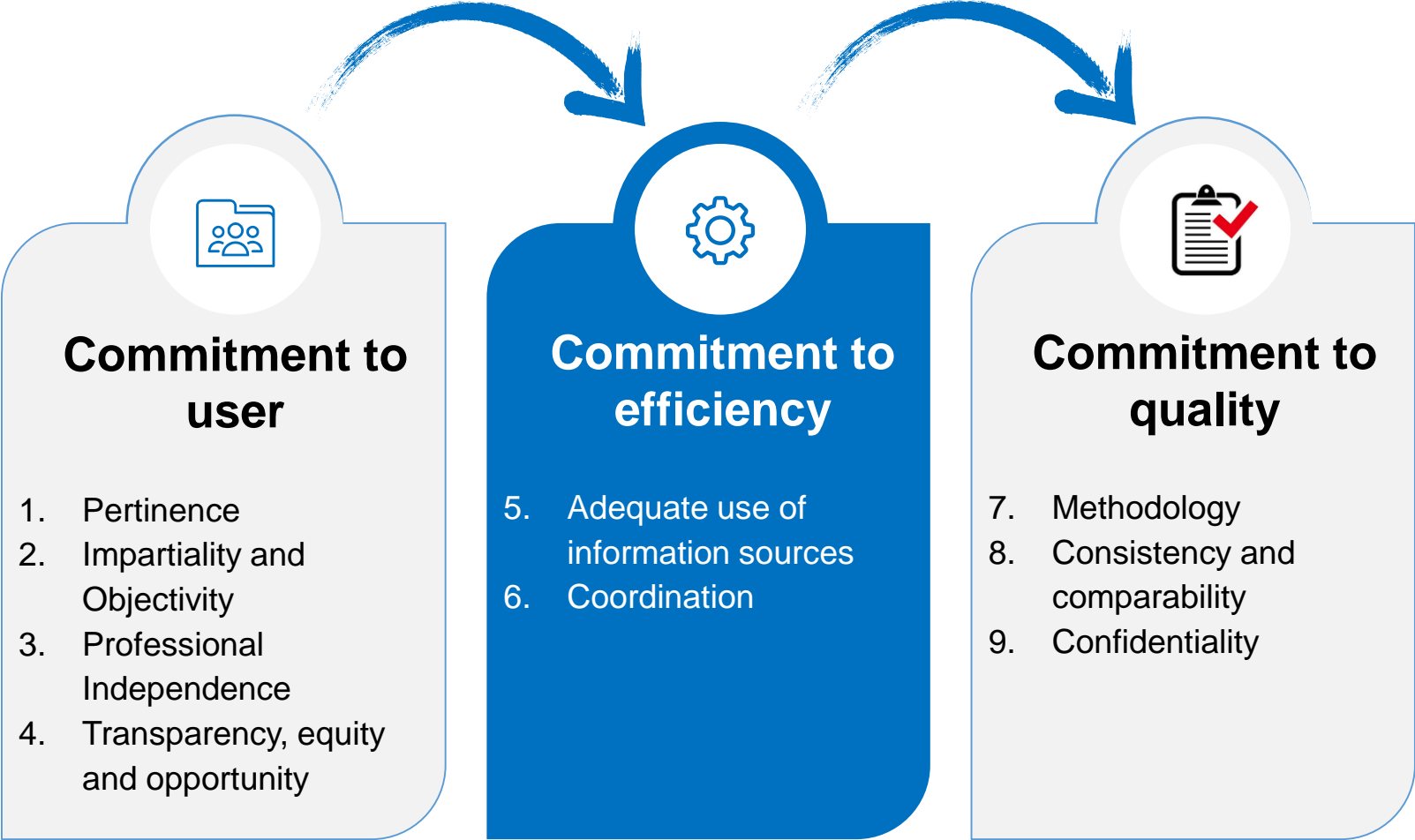


### Sectorial, Regional and Local Statistics Plans

Realize by the statistical offices of the sectors and institutions of the three levels of government.

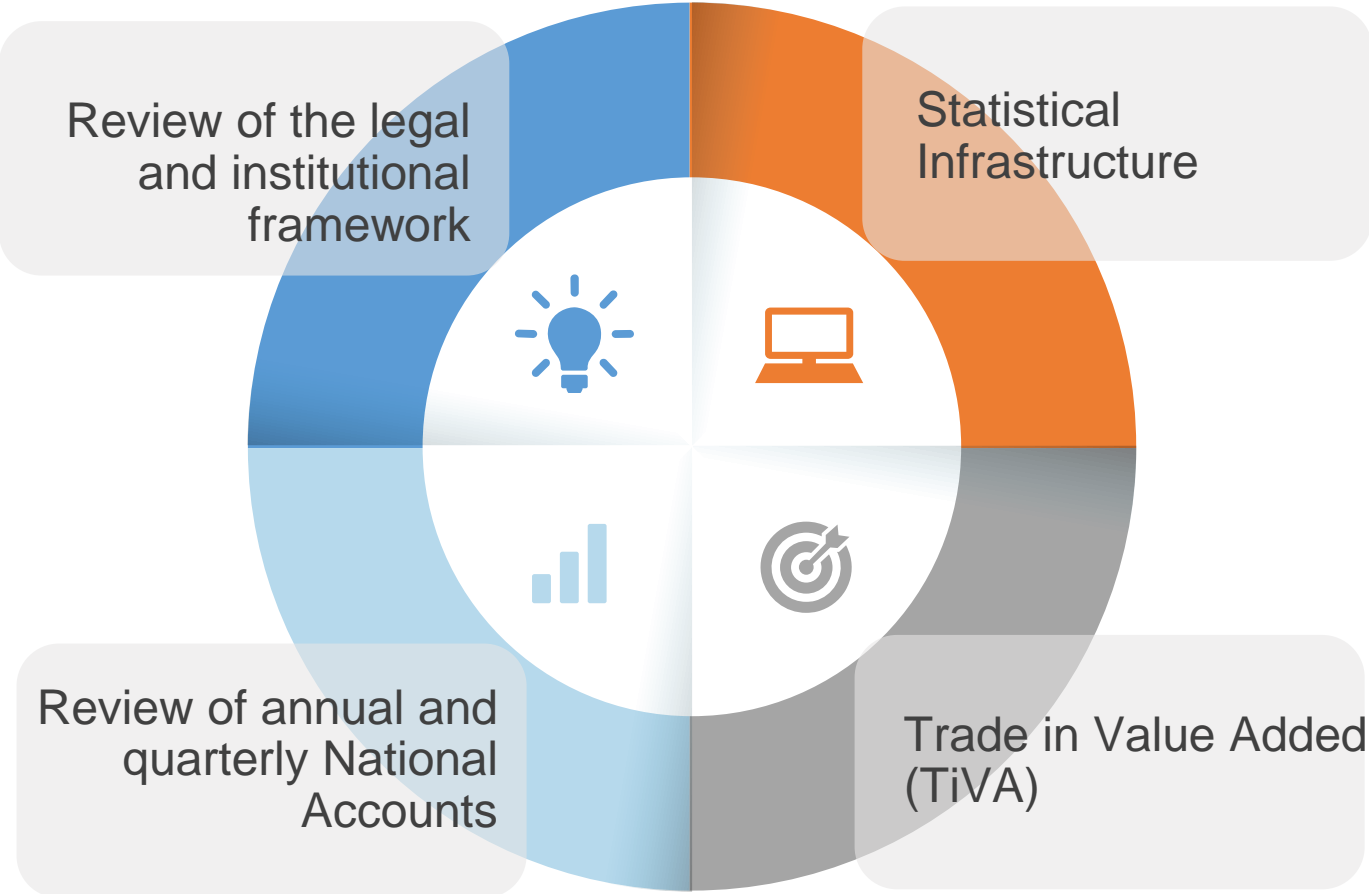
## 2. Institutional Context and Regulations in Peru

### Code of Good Statistical Practices



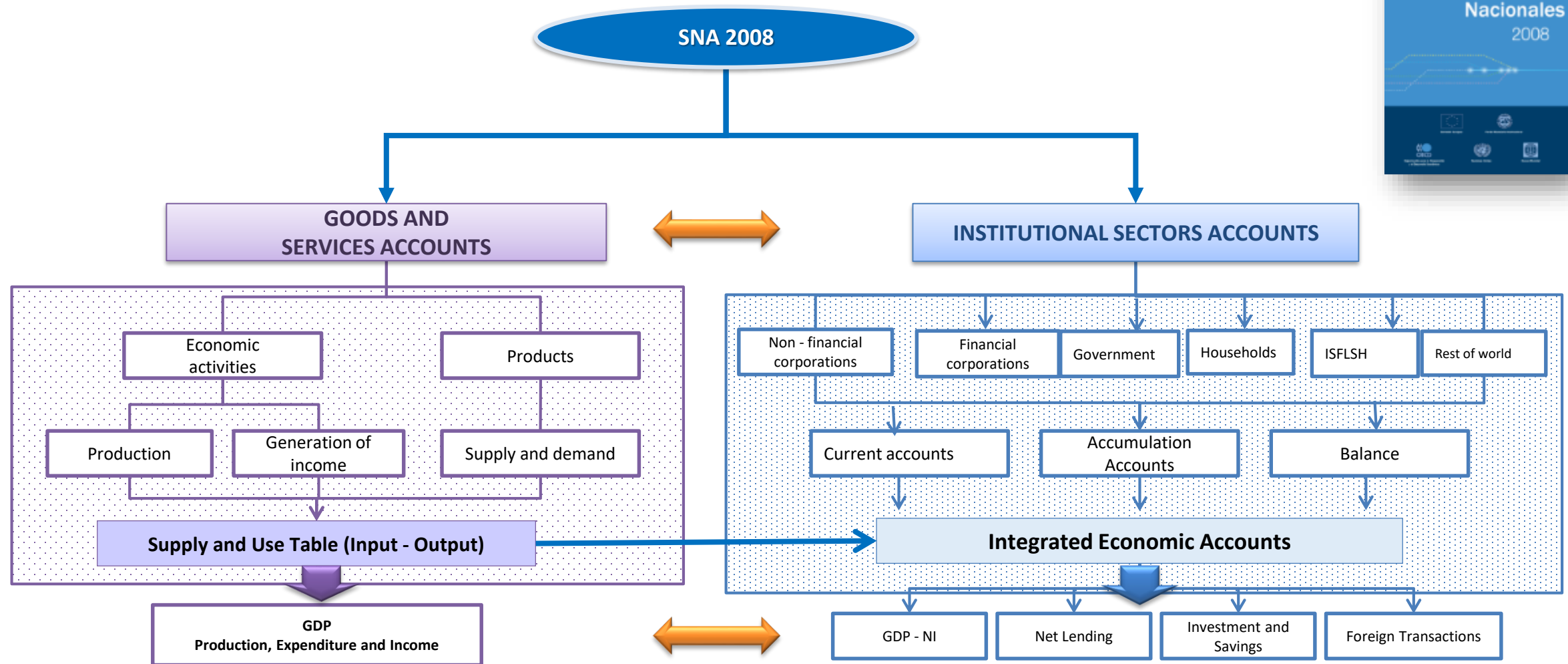
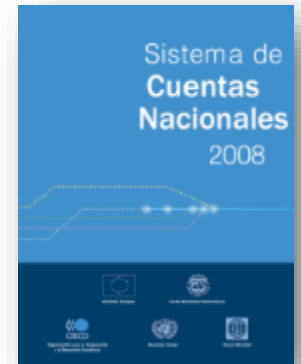
## 2. Institutional Context and Regulations in Peru

### Statistical Review by OECD

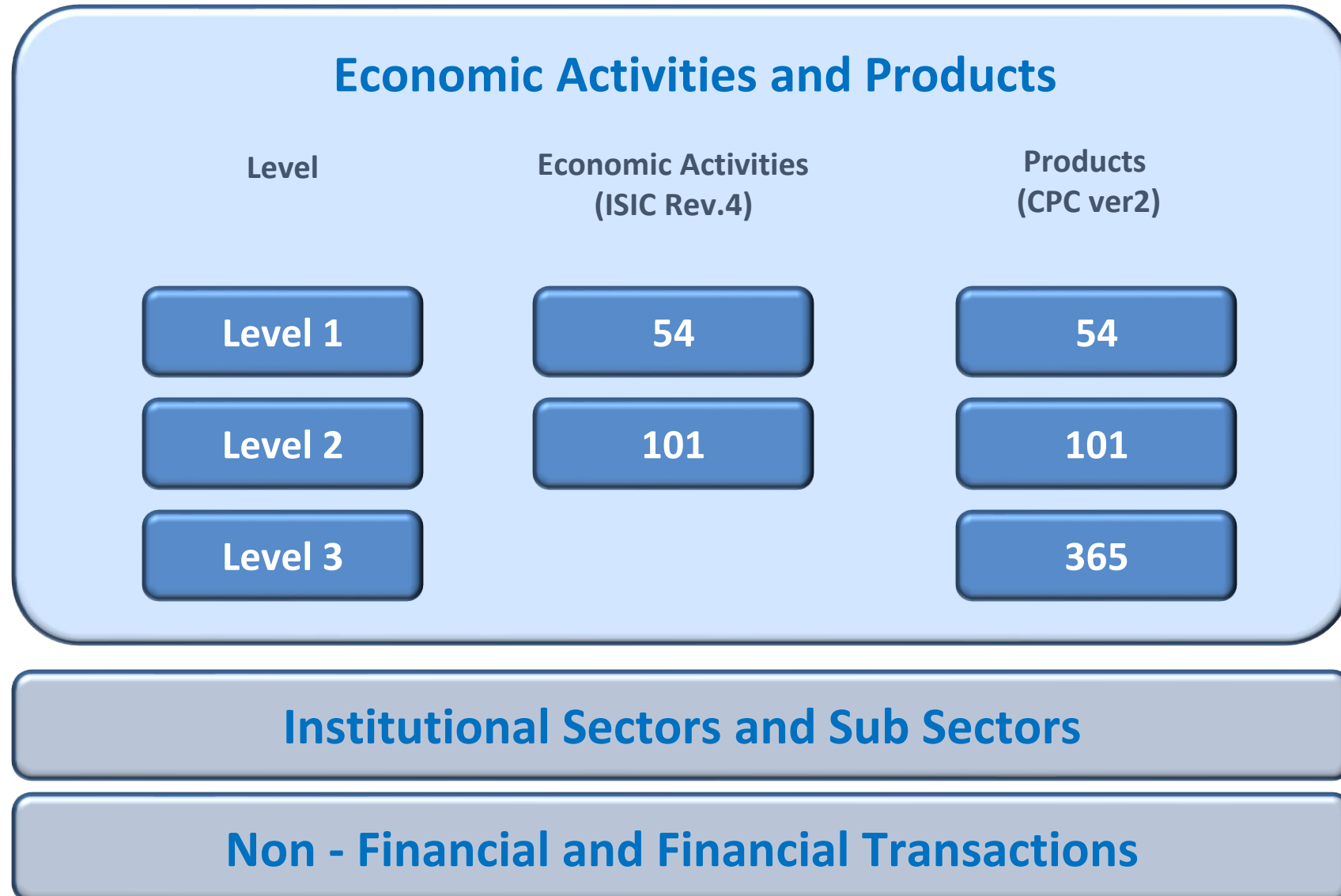


### 3. Integration of Economic Statistics in National Accounts

# Framework of System of National Accounts

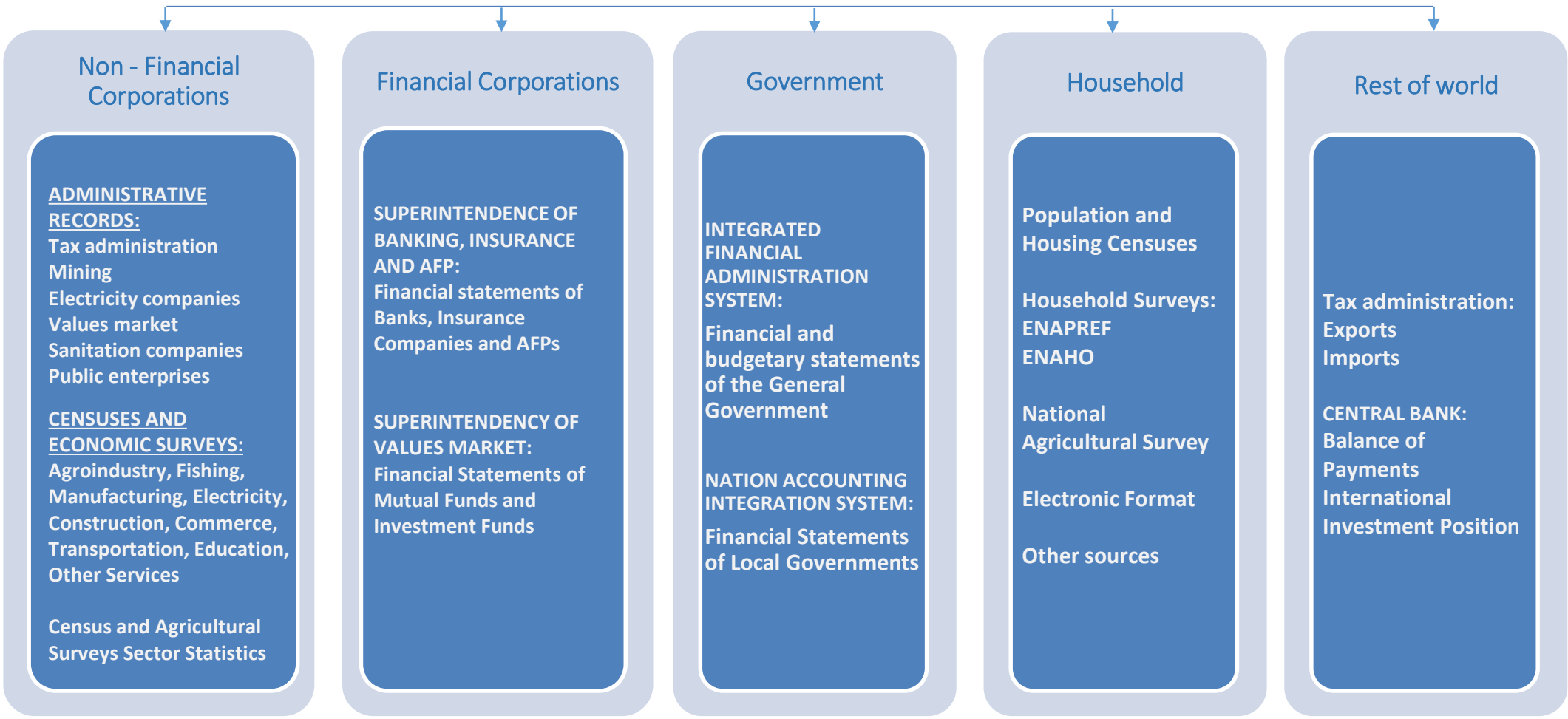


## Adoption of International Classifications



### 3. Integration of Economic Statistics in National Accounts

## Sources: Censuses, Surveys and Administrative Records



Annual and quarterly monitoring indicators: indicators of physical volume of production, economy price indices, regional statistics.

### 3. Integration of Economic Statistics in National Accounts

## Statistics by Industry: Example

### Manufacturing

#### Provider

- National Superintendence of Tax Administration
- Ministry of Production
- Ministry of Agriculture and Irrigation
- Ministry of Energy and Mines
- National Institute of Statistics and Informatics
- Ministry of Labor and Employment Promotion
- International agencies (Bloomberg LP, Reuters)

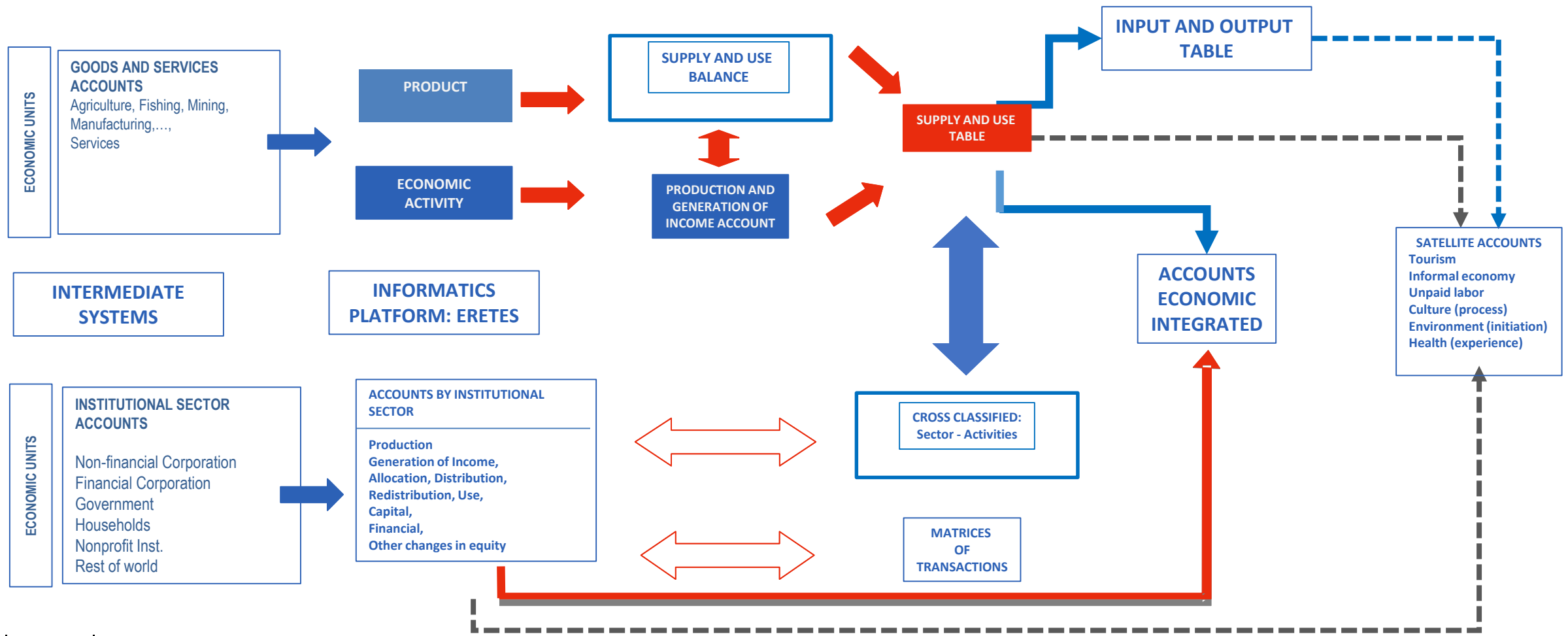
#### Statistical data

- Tax Administration Records
- Physical Volume Index by activities
- Annual quantity produced in tons
- Annual quantity produced in tons of agro industrial products.
- Annual produced quantity of refined hydrocarbons and minerals
- Wholesale Price Index
- Household Surveys: average earnings and employment
- Fishmeal and fish oil exports
- Electronic format
- International mineral price



### 3. Integration of Economic Statistics in National Accounts

## National Accounts Preparation Process



# 3. Integration of Economic Statistics in National Accounts

## SUPPLY AND USE TABLE 2018

(Thousands of millions of soles)

Cod.	Oferta							Demanda Intermedia							Demanda Final							Total Demanda
	Productos	Producción	Importaciones	Derechos de Importación	Margenes de Distribución	Impuestos netos de subsidios	Total Oferta	Productos	1	2	3	4	5	Demanda Intermedia	Gasto de Consumo Final de los Hogares	Gasto de Consumo Final del Gobierno	Gasto de Consumo Final de las ISFLSH	Formación Bruta de Capital Fijo	Variación de Existencias	Exportaciones	Demanda Final	
									Extracción	Manufactura	Construcción	Comercio	Otros servicios									
1	Agricultura	62	6	0	23	1	92	Agricultura	8	37	0	0	4	49	26	0	0	2	2	13	43	92
2	Pesca	8	0	0	2	0	10	Pesca	0	7	0	0	0	7	3	0	0	0	0	0	3	10
3	Minería	106	11	0	7	0	124	Minería	5	28	3	0	2	38	0	0	0	1	-3	87	86	124
4	Manufactura	281	131	1	82	33	528	Manufactura	25	93	35	8	82	243	168	0	0	48	3	66	285	528
5	Electricidad	30	0	0	0	3	33	Electricidad	3	6	0	2	10	21	12	0	0	0	0	0	12	33
6	Construcción	103	0	0	0	2	106	Construcción	0	0	2	0	3	6	0	0	0	99	1	0	100	106
7	Comercio	122	0	0	-111	1	12	Comercio	0	0	0	0	8	9	3	0	0	0	0	0	3	12
8	Transportes	102	5	0	-3	2	106	Transportes	9	6	1	14	23	52	46	0	0	0	0	7	54	106
9	Alojamiento y restaurantes	63	3	0	0	4	70	Alojamiento y restaurantes	0	0	0	1	4	6	57	0	1	0	0	6	64	70
10	Telecomunicaciones	39	3	0	0	3	45	Telecomunicaciones	0	0	0	1	16	19	24	0	0	2	0	1	27	45
11	Serv. Financieros y seguros	54	4	0	0	0	58	Serv. Financieros y seguros	5	5	1	7	17	35	22	0	0	0	0	0	23	58
12	Serv. prestados a empresas	65	7	0	0	2	74	Serv. prestados a empresas	5	8	4	7	43	66	4	0	0	1	0	3	8	74
13	Administración pública	58	0	0	0	0	58	Administración pública	0	0	0	0	0	0	2	56	0	0	0	0	58	58
14	Otros servicios	146	2	0	0	5	153	Otros servicios	0	1	0	2	13	17	91	39	3	0	0	2	136	153
	<b>TOTAL</b>	<b>1239</b>	<b>172</b>	<b>1</b>	<b>0</b>	<b>57</b>	<b>1469</b>	<b>TOTAL</b>	<b>62</b>	<b>191</b>	<b>46</b>	<b>43</b>	<b>226</b>	<b>568</b>	<b>461</b>	<b>96</b>	<b>4</b>	<b>153</b>	<b>2</b>	<b>185</b>	<b>902</b>	<b>1469</b>

### GDP Production

**Gross Domestic Product = 730**  
 (+) Gross production Value = 1 239  
 (-) Intermediate Consumption = 568  
 (+) Taxes on Products = 58

<b>Valor agregado bruto</b>	<b>118</b>	<b>94</b>	<b>50</b>	<b>75</b>	<b>334</b>	<b>672</b>
Remuneración de los asalariados	22	26	20	23	136	228
Otros impuestos sobre la producción	0	1	0	0	3	5
<b>Ingreso de explotación</b>	<b>96</b>	<b>67</b>	<b>30</b>	<b>52</b>	<b>194</b>	<b>439</b>
Excedente bruto de explotación	58	51	21	21	127	277
Ingreso mixto	38	16	9	31	67	162
<b>Producción bruta</b>	<b>180</b>	<b>285</b>	<b>96</b>	<b>118</b>	<b>560</b>	<b>1239</b>

### GDP Income

**Gross Domestic Product = 730**  
 (+) Remuneration = 228  
 (+) Taxes on products = 58  
 (+) Activity taxes = 5  
 (+) Gross operating surplus = 277  
 (+) Mixed gross income = 162

### GDP Expenditure

**Gross Domestic Product = Private consumption + Government consumption + Investment + Net external sector**  
**730 = 465 + 96 + 155 + 13**

### 3. Integration of Economic Statistics in National Accounts

## GOODS AND SERVICES ACCOUNTS 2018

(Thousands of millions of soles)

#### Supply and Demand Balance

		2 018
<b>Oferta</b>	Producción Nacional	1 239
	Importaciones	172
	Derechos de Importación	1
	Impuestos netos de subsidios	57
<b>Total</b>		<b>1 469</b>
<b>Demanda</b>	Demanda Intermedia	568
	Consumo Final de los Hogares	461
	Consumo Final de las ISFLSH	4
	Consumo Final de Gobierno	96
	Formación Bruta de Capital	155
	Exportaciones	185

#### Production Account

Empleos		Recursos			
	Valores	%	Valores	%	
Consumo Intermedio	568	43,8	<b>Producción</b>	<b>1 239</b>	<b>95,5</b>
			Producción de Mercado	1 079	83,2
			Producción para uso final propio	57	4,4
			Otra Producción no de Mercado	103	7,9
			<b>Impuestos netos de subsidios</b>	<b>58</b>	<b>4,5</b>
Producto Bruto Interno	730	56,2			
<b>Total Empleos</b>	<b>1 298</b>	<b>100,0</b>	<b>Total Recursos</b>	<b>1 298</b>	<b>100,0</b>

#### Generation of Income Account

Empleos		Recursos			
	Valores	%	Valores	%	
Remuneración de los asalariados	228	31,2	<b>Producto Bruto Interno</b>	<b>730</b>	<b>100,0</b>
Sueldos y Salarios	206	28,3			
Contribuciones sociales de empleadores	21	2,9			
<b>Impuestos netos de subsidios</b>	<b>58</b>	<b>8,0</b>			
<b>Otros Impuestos sobre la Producción</b>	<b>5</b>	<b>0,7</b>			
<b>Ingreso de Explotación Bruto</b>	<b>439</b>	<b>60,1</b>			
Excedente de Explotación Bruto	277	38,0			
Ingreso Mixto Bruto	162	22,1			
<b>Total Empleos</b>	<b>730</b>	<b>100,0</b>	<b>Total Recursos</b>	<b>730</b>	<b>100,0</b>

### 3. Integration of Economic Statistics in National Accounts

## INTEGRATED ECONOMIC ACCOUNTS 2018

(Thousands of millions of soles)

S.2	S.1	S.15	S.14	S.13	S.12	S.11		S.11	S.12	S.13	S.14	S.15	S.1	S.2
Cuenta Resto del Mundo	Economía Total	ISFLSH	Hogares	Gobierno General	Sociedades Financieras	Sociedades No Financieras	Transacciones y Saldos Contables	Sociedades No Financieras	Sociedades Financieras	Gobierno General	Hogares	ISFLSH	Economía Total	Cuenta Resto del Mundo
0	0	0	0	0	0	0	Importaciones de bienes y servicios	0	0	0	0	0	0	172
185	0	0	0	0	0	0	Exportaciones de bienes y servicios	0	0	0	0	0	0	0
0	0	0	0	0	0	0	Producción	730	54	106	345	5	1239	0
0	568	3	133	35	18	379	Consumo intermedio	0	0	0	0	0	0	0
<b>0</b>	<b>730</b>	<b>2</b>	<b>212</b>	<b>71</b>	<b>36</b>	<b>351</b>	<b>Valor agregado bruto / Producto Bruto Interno1/</b>	<b>351</b>	<b>36</b>	<b>71</b>	<b>212</b>	<b>2</b>	<b>730</b>	<b>0</b>
-13	0	0	0	0	0	0	Saldo de bienes y servicios con el exterior	0	0	0	0	0	0	-13
0	228	1	31	63	11	121	Remuneración de los asalariados	0	0	0	228	0	228	0
0	63	0	0	0	0	5	Impuestos menos subvenciones sobre la producción y las importaciones	0	0	63	0	0	63	0
0	277	0	19	8	25	225	Excedente de explotación bruto	225	25	8	19	0	277	0
0	162	0	162	0	0	0	Ingreso mixto bruto	0	0	0	162	0	162	0
7	189	0	6	11	33	140	Rentas de la propiedad (incluye distribución del SIFMI)	9	28	13	104	0	153	43
<b>0</b>	<b>694</b>	<b>0</b>	<b>506</b>	<b>73</b>	<b>20</b>	<b>94</b>	<b>Ingreso Nacional Bruto / Saldo de ingresos primarios bruto</b>	<b>94</b>	<b>20</b>	<b>73</b>	<b>506</b>	<b>0</b>	<b>694</b>	<b>0</b>
4	43	0	16	0	4	23	Impuestos corrientes sobre el ingreso, la riqueza, etc.	0	0	46	0	0	46	0
12	146	0	20	116	4	7	Otras transferencias corrientes	2	3	114	34	4	157	0
<b>0</b>	<b>709</b>	<b>4</b>	<b>486</b>	<b>118</b>	<b>34</b>	<b>66</b>	<b>Ingreso disponible bruto</b>	<b>66</b>	<b>34</b>	<b>118</b>	<b>486</b>	<b>4</b>	<b>709</b>	<b>0</b>
0	561	4	461	96	0	0	Gasto de consumo final	0	0	0	0	0	0	0
<b>0</b>	<b>148</b>	<b>0</b>	<b>44</b>	<b>21</b>	<b>16</b>	<b>66</b>	<b>Ahorro bruto / Saldo Corriente con el exterior</b>	<b>66</b>	<b>16</b>	<b>21</b>	<b>44</b>	<b>0</b>	<b>148</b>	<b>0</b>
0	155	0	48	33	2	73	Formación bruta de capital	0	0	0	0	0	0	0
0	0	0	0	0	0	0	Transferencias de capital netas	-1	0	-1	1	0	0	0
<b>8</b>	<b>-8</b>	<b>0</b>	<b>3</b>	<b>-13</b>	<b>14</b>	<b>-12</b>	<b>Préstamo neto (+) / Endeudamiento neto (-)</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>17</b>

$$\text{National Income} = \text{GDP} + \text{Net factor Income}$$

$$694 = 730 + 7 - 43$$

$$\text{Disposable Income} = \text{National Income} + \text{Net current transfers}$$

$$709 = 694 + 4 + 12$$

$$\text{Saving} = \text{Disposable Income} - \text{Consumption}$$

$$148 = 709 - 561$$

$$\text{Net Lending} = \text{Saving} + \text{Net Capital transfers} - \text{GFK}$$

$$-8 = 148 + 0 - 155$$

### 3. Integration of Economic Statistics in National Accounts

## SATELLITE ACCOUNTS

Main Input:

Supply and Use Table  
(Input – Output)



Production  
Matrix

Supply  
Matrix

Demand  
Intermediate  
Matrix

Final Demand  
Matrix

Value Added  
Matrix

01

Tourism Satellite Account  
INEI – Ministry of Foreign Trade and Tourism  
Review: 2001/ 2002/ 2007/ 2011/ 2015/ 2017 - 2018

02

Informal Production and Employment in Peru  
Satellite Account of the Informal Economy 2007-2018

03

Satellite Account of Unpaid Household Labor  
INEI – Ministry of Women and Vulnerable Populations  
Published in 2016 from ENUT and CCNN 2010

04

Advances Satellite Account of Culture  
Cultural Measurements  
INEI – Ministry of Culture  
Published in 2017 from Base Year Results

05

Environmental Accounts Advances  
Forest (SERFOR)  
Water (ANA)  
Spending on Environmental Protection (MINAM)  
Current Situation: in process

06

Health Accounts Advances  
INEI – Ministry of Health  
Current Situation: in coordination



### 3. Integration of Economic Statistics in National Accounts

## National Accounts Publications



**Quarterly GDP:  
Behaviour of the Peruvian  
Economy to 2020-II**

[https://www.inei.gob.pe/media/MenuRecursivo/boletines/boletin\\_pbi\\_trimestral\\_iit\\_2020.pdf](https://www.inei.gob.pe/media/MenuRecursivo/boletines/boletin_pbi_trimestral_iit_2020.pdf)



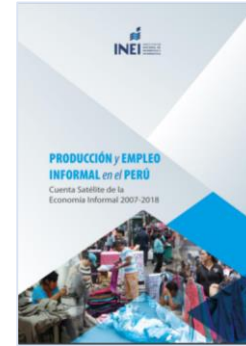
**Overview of the  
Peruvian Economy  
1950 - 2019**

[https://www.inei.gob.pe/media/MenuRecursivo/publicaciones\\_digitales/Est/Lib1726/](https://www.inei.gob.pe/media/MenuRecursivo/publicaciones_digitales/Est/Lib1726/)



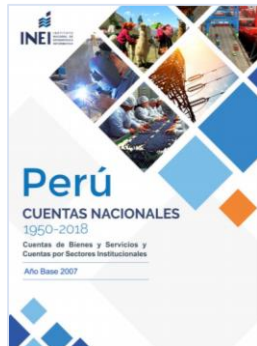
**Perú: GDP by Regions  
2007-2019**

[https://www.inei.gob.pe/media/MenuRecursivo/publicaciones\\_digitales/Est/Lib1693/](https://www.inei.gob.pe/media/MenuRecursivo/publicaciones_digitales/Est/Lib1693/)



**Informal Production and  
Employment in Peru  
Satellite Account of the  
Informal Economy 2007-2018**

[https://www.inei.gob.pe/media/MenuRecursivo/publicaciones\\_digitales/Est/Lib1701/libro.pdf](https://www.inei.gob.pe/media/MenuRecursivo/publicaciones_digitales/Est/Lib1701/libro.pdf)



**Peru: National Accounts  
1950-2018  
Goods and Services Account  
Institutional Sectors Account**

[https://www.inei.gob.pe/media/MenuRecursivo/publicaciones\\_digitales/Est/Lib1726/](https://www.inei.gob.pe/media/MenuRecursivo/publicaciones_digitales/Est/Lib1726/)



**Peru: Yearbook of  
Environmental  
Statistics 2019**

[https://www.inei.gob.pe/media/MenuRecursivo/publicaciones\\_digitales/Est/Lib1704/libro.pdf](https://www.inei.gob.pe/media/MenuRecursivo/publicaciones_digitales/Est/Lib1704/libro.pdf)

### 3. Integration of Economic Statistics in National Accounts

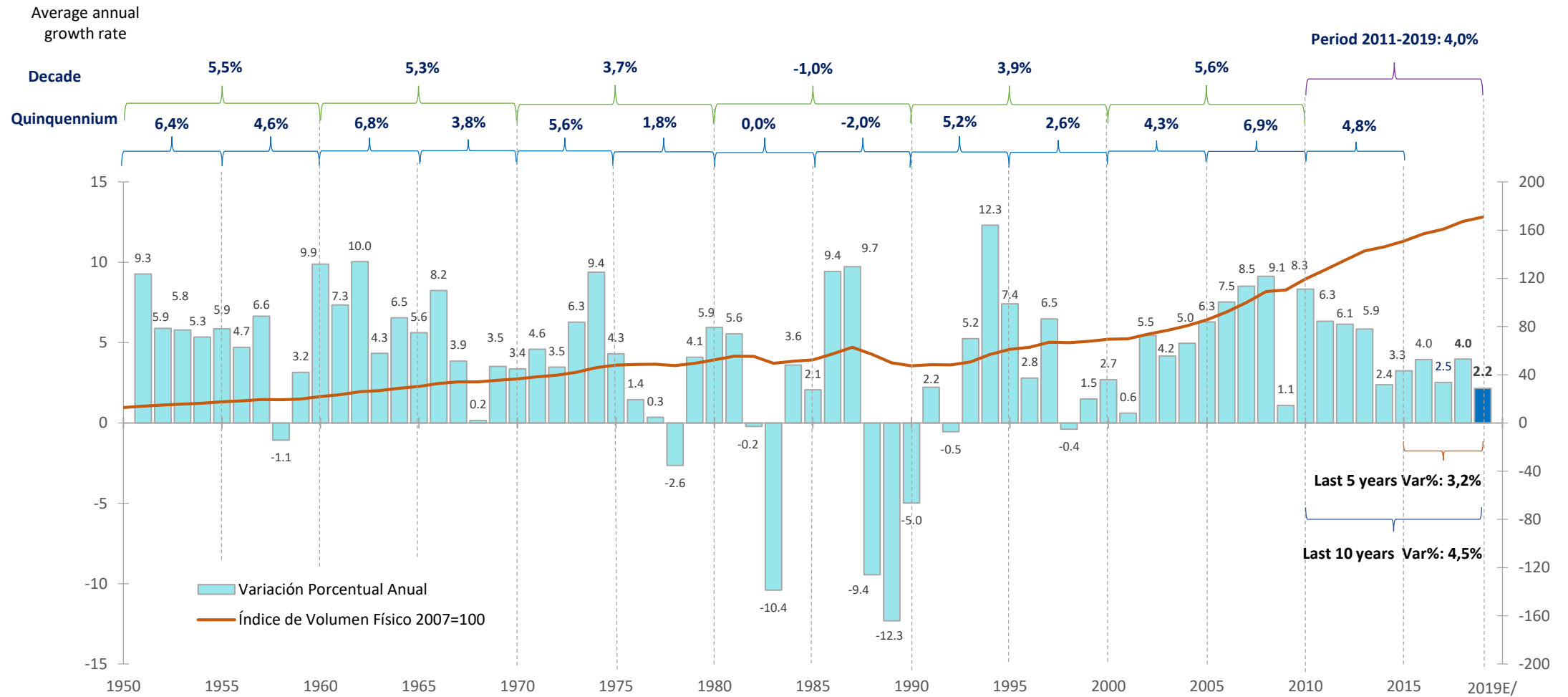
# Innovations

Advanced and in project



## PERÚ: GROSS DOMESTIC PRODUCT 1950 - 2019

(Base Year: 2007=100)



Source: National Institute of Statistics and Informatics.



## 4. Conclusions

1. The objective of the Integrated Economic Statistics Guidelines is to help countries to prepare a set of integrated economic statistics in response to need for a coherent framework to quantify a country's economic activity in an increasingly interconnected world economy.
2. The Integrated Approach to Economic Statistics is supported by three components: The SNA Conceptual Framework, institutional devices, and a process that goes from data collection to dissemination.
3. Legal, organizational and planning framework provides the normative support to carry out actions to integrate economic statistics.
4. In Peru, the National Statistical System has been in existence for almost 45 years and the governing body is the National Institute of Statistics and Informatics, body where the National Accounts are prepared.
5. The National Accounts of Peru are developed within the framework of the 2008 SNA, Supply and Use Tables and Integrated Economic Accounts are prepared annually, a set of Satellite Accounts is also developed.
6. Coordination between INEI and information providers and users has been essential for harmonization of concepts within the framework of 2008 SNA, which facilitates the integration of economic statistics in the National Accounts. It is developed through inter-institutional commissions, working groups, consultative commissions and other forms.
7. Institutions that prepare Public Finance and Balance of Payments are in the process of adapting to latest manuals harmonized with 2008 SNA.
8. INEI, in the context of a Country Program with the OECD, had a Statistical Review and some recommendations that we have been adopting.

**Thanks**