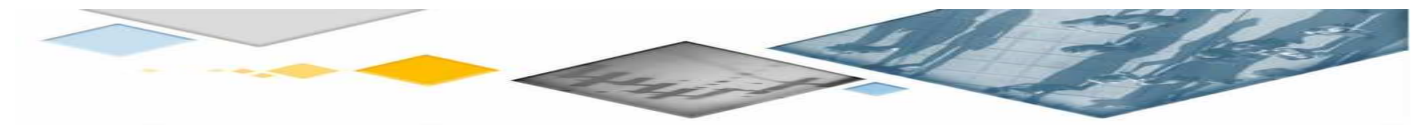




Estimation of GDP by municipalities

Alaitz Gallastegi, Patxi Garrido and Marta Salvador

Neuchatel, 14th September 2011



Outline

1. Introduction
2. Municipal structure of the Basque Country
3. Economic activities estimated
4. Information sources
5. Estimation procedure
6. Future work



1. Introduction

Objective of National Accounts

- Offer a integrated system of accounting
- Help to quantify the effects of economic policies adopted

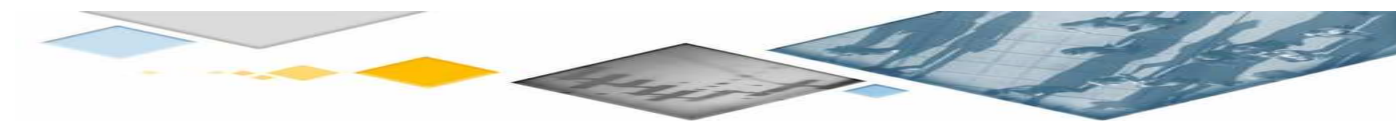
Municipal information

- Demand for information has grown considerably

Objective of Eustat

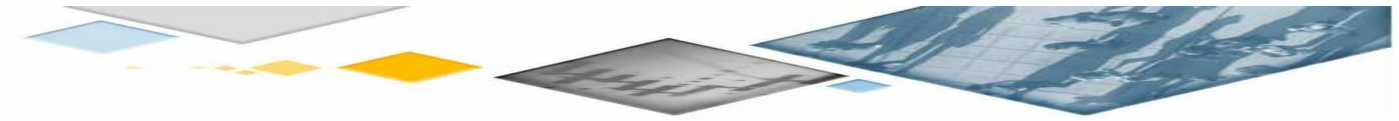


**Obtain ANNUAL GDP per capita, GDP per employee
and distribution of GVA BY MUNICIPALITIES**



Outline

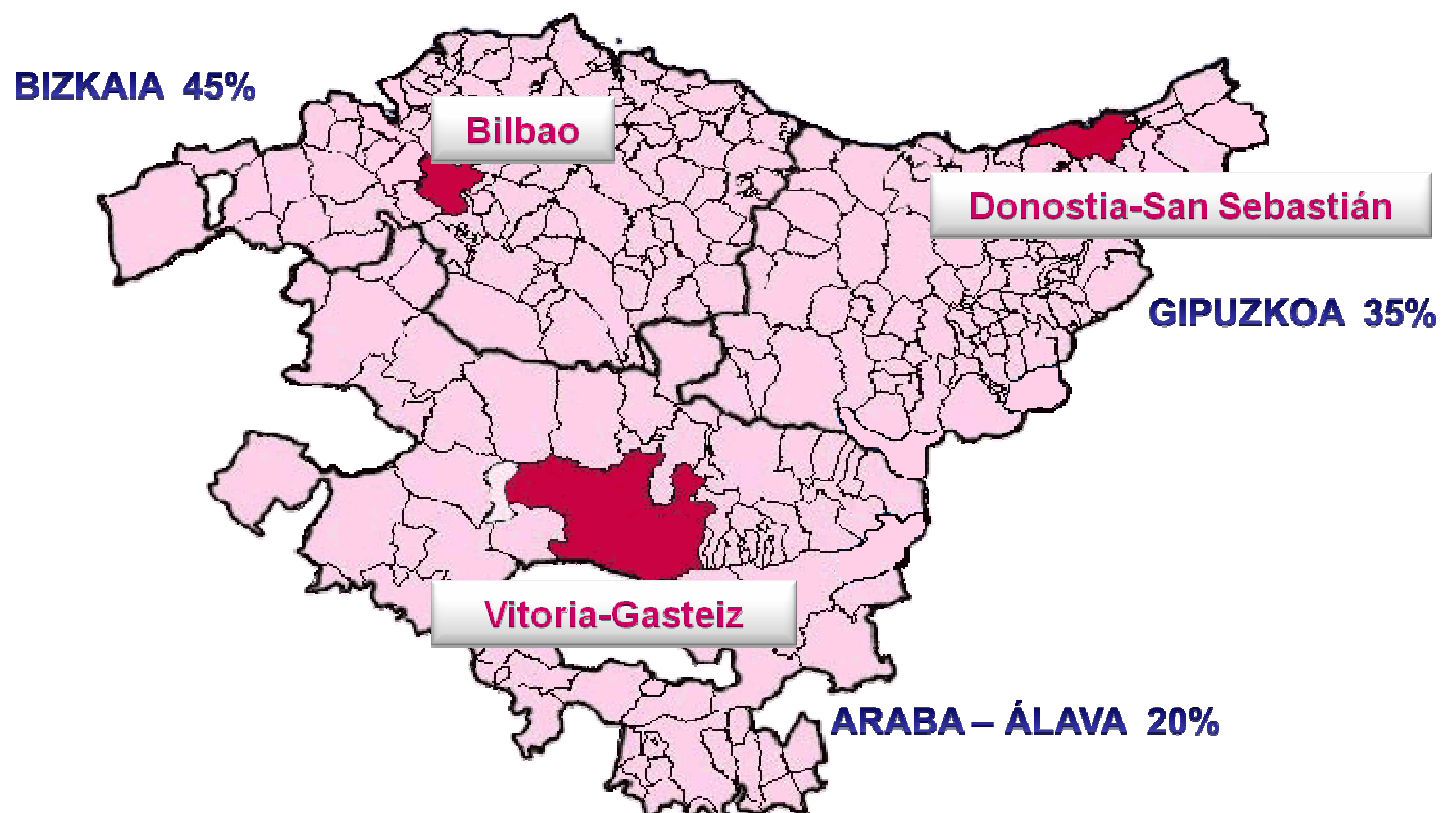
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2. Municipal structure of the Basque Country



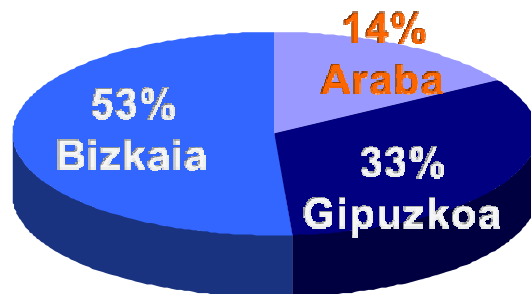
2. Municipal structure of the Basque Country



2. Municipal structure of the Basque Country

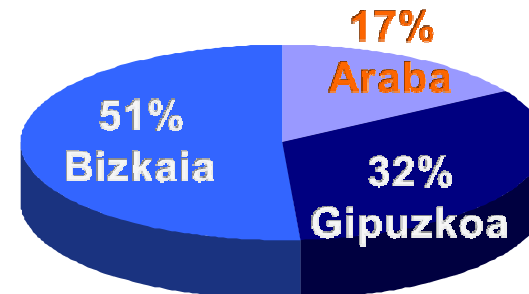
Population

2,162.944 inhabitants



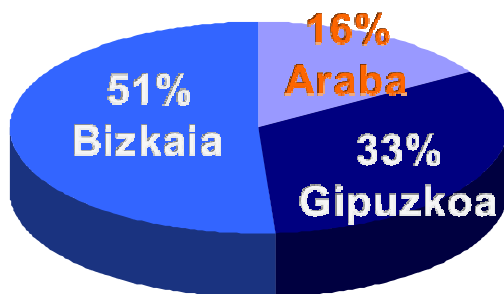
GDP (2008)

67,924.490 thousand €



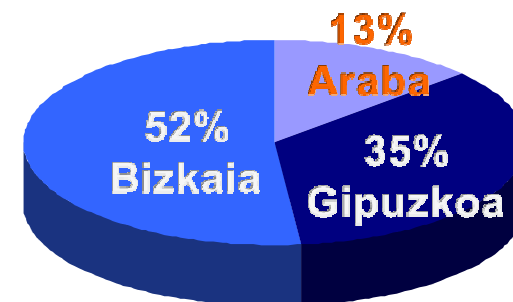
Employment

939.564 employees



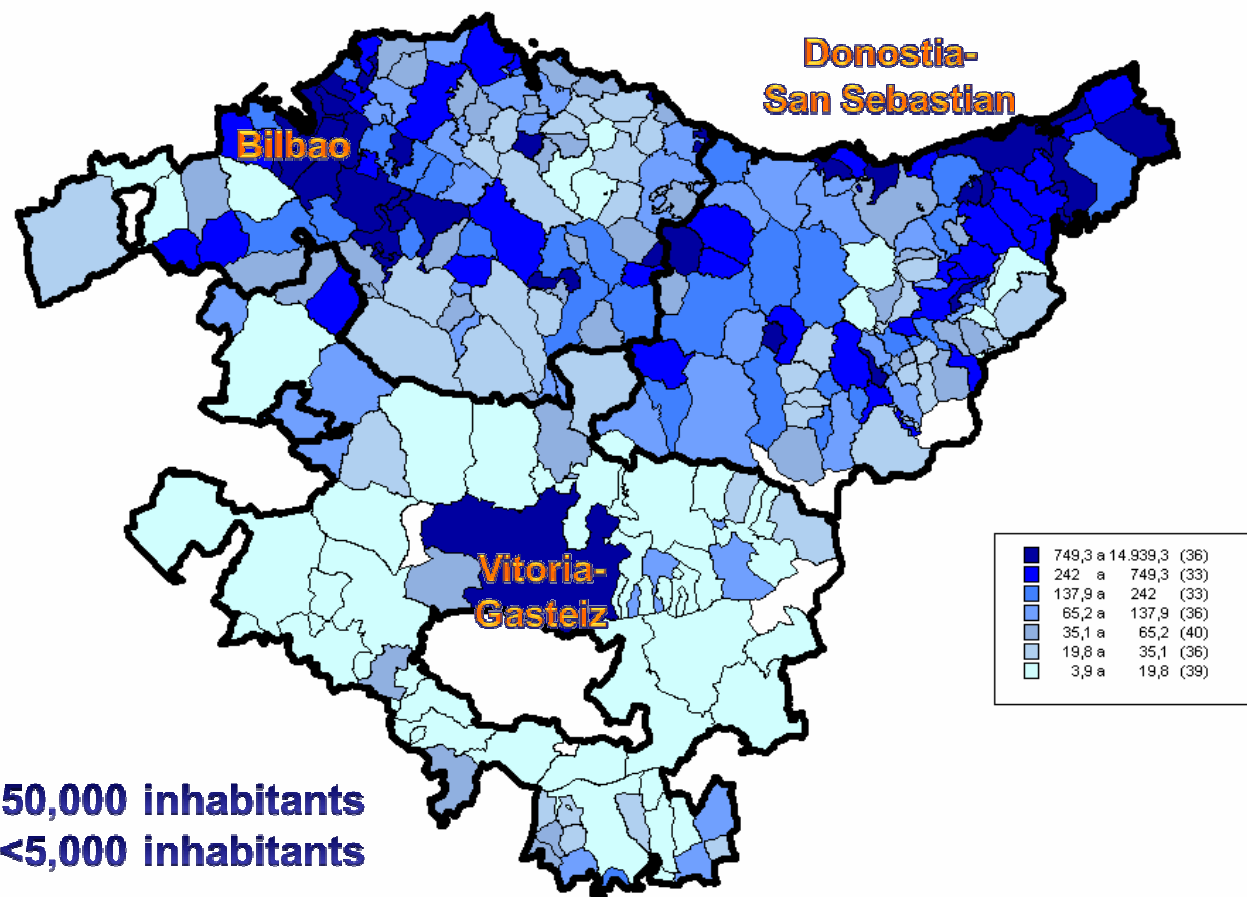
Work establishments

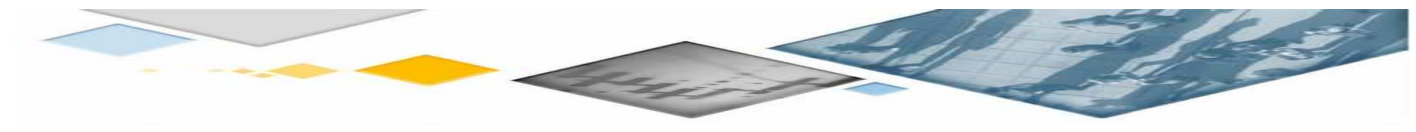
202.159



2. Municipal structure of the Basque Country

Population density 2008

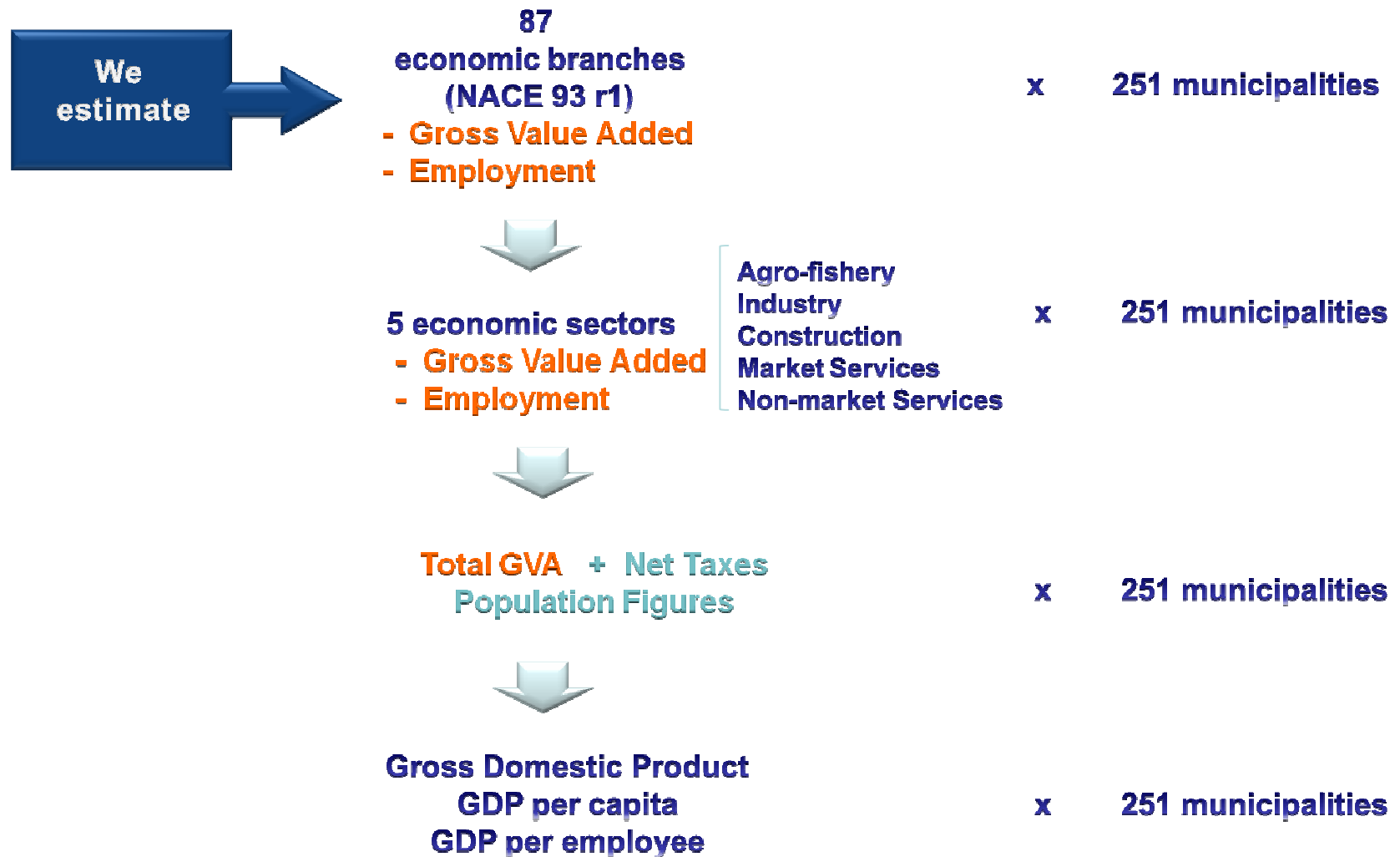




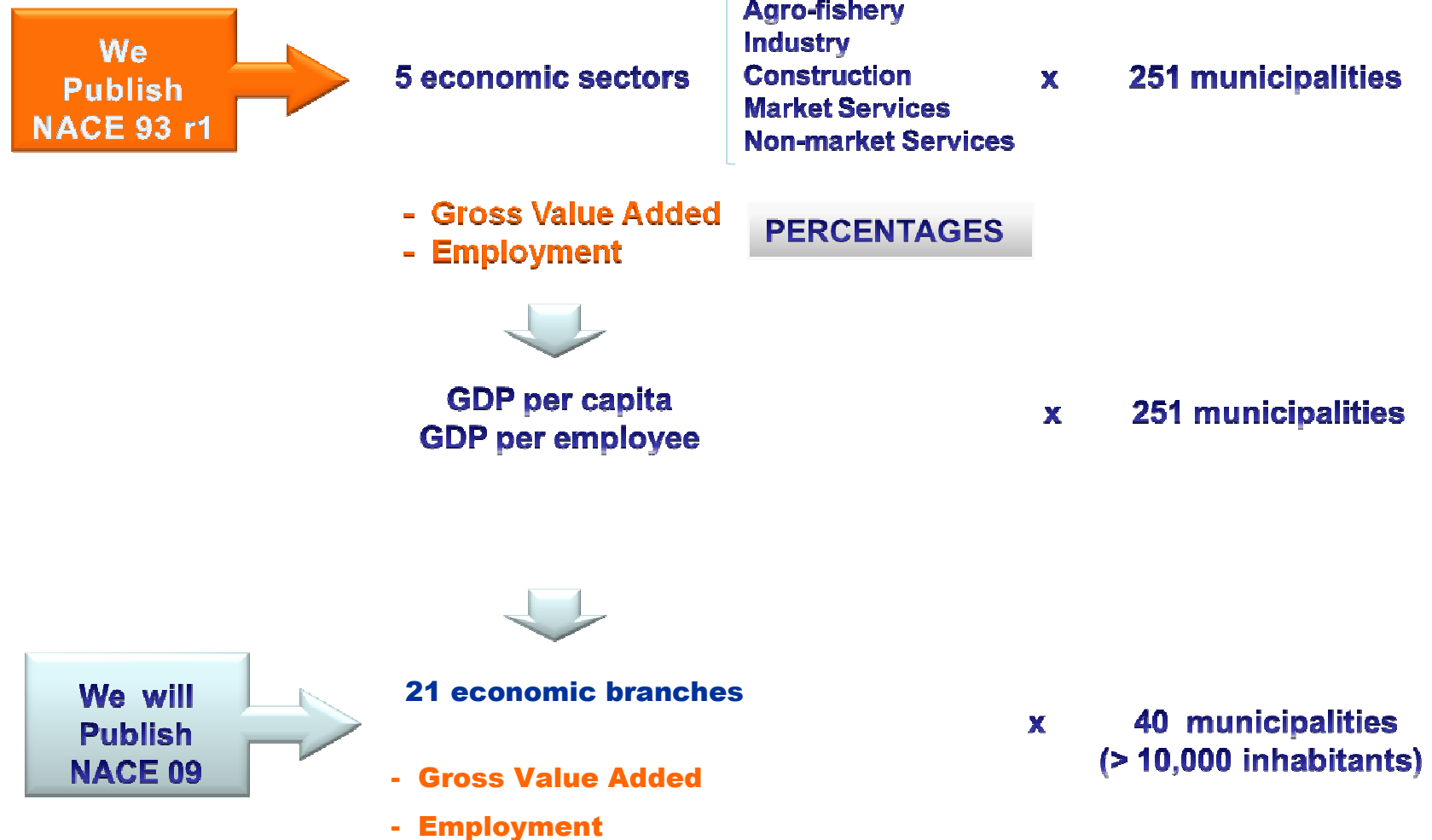
Outline

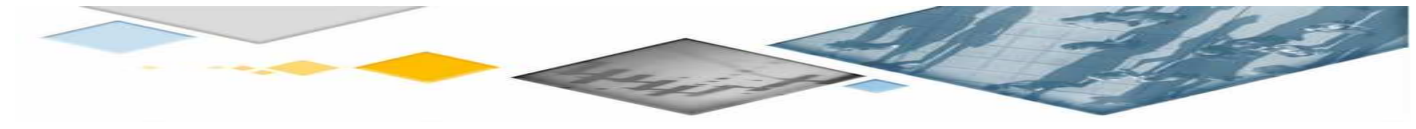
1. Introduction
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3. **Economic activities estimated**
4. Information sources
5. Estimation procedure
6. Future work

3. Estimated economic activities



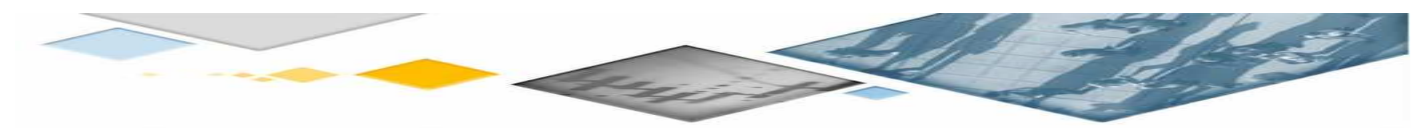
3. Estimated economic activities





Outline

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4. Data sources

Main sources

Directory of Economic Activities (DIREA)

Directory of Population

Directory of Housing

Annual Economic Accounts (Basque Country, provinces & shires)

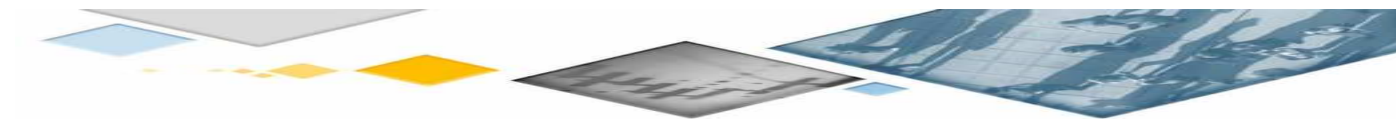
Structural surveys (annual, biennial & quinquennial)

Public Sector Accounts (Basque Government, Provincial & Municipal Councils)

Short term surveys

Municipal indicators

Private and public main enterprises



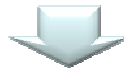
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5. Estimation procedure

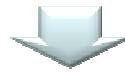
Heterogeneity of the activities



**different method of estimation
for each branch /sector**



**number, quality and
availability of sources**



Direct indicators

→ structural surveys or annual accounts

Indirect indicators

- employment of DIRAE
- other indicators with discriminating capacity
- linear estimation models



5. Estimation procedure

Agro-fishery



Structural surveys (annual) and DIRAE

Industry



Structural surveys (annual) and DIRAE
Energy branches → Composite indicator

Construction



Composite indicator

Market Services



Structural survey (quinquennial)
Mercantile Register (annual)
Specific branches → DIRAE
Specific branches → Composite indicators

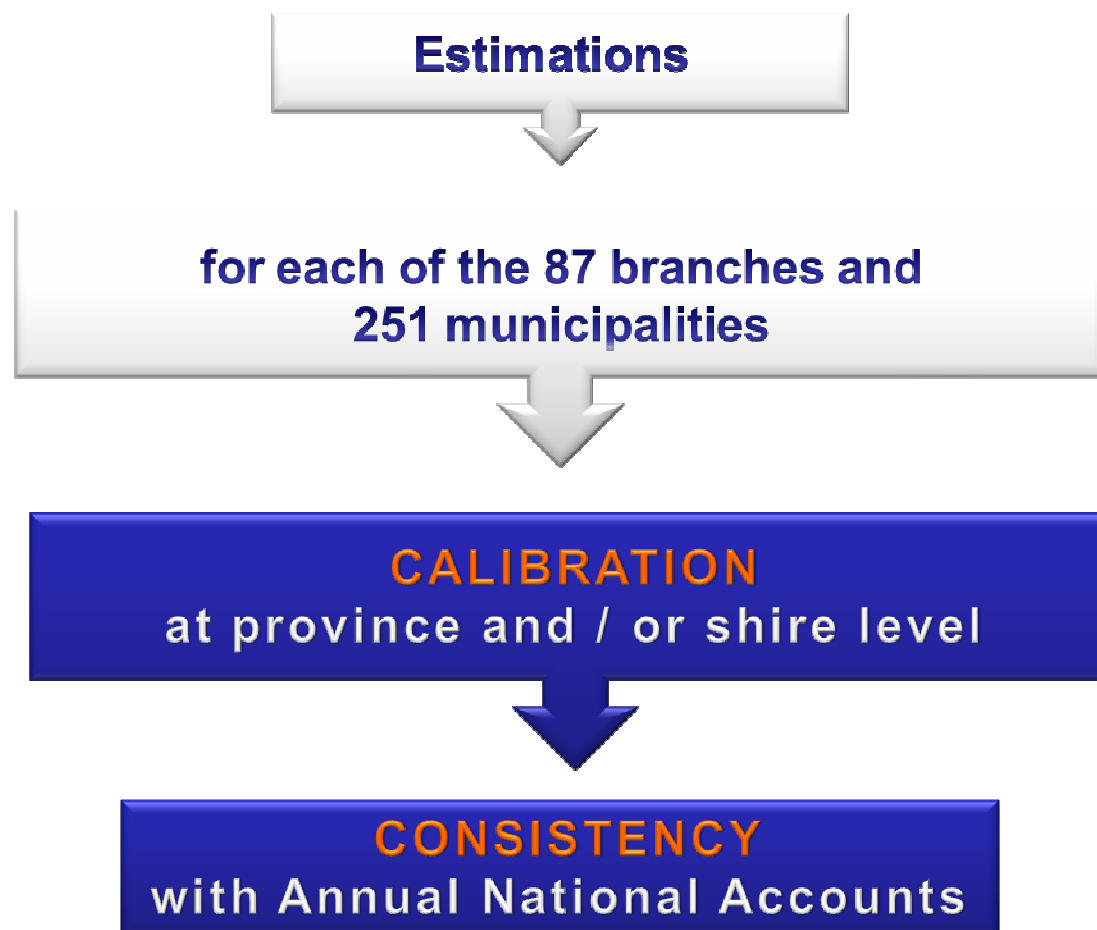
Non-market Services



Public Sector Accounts

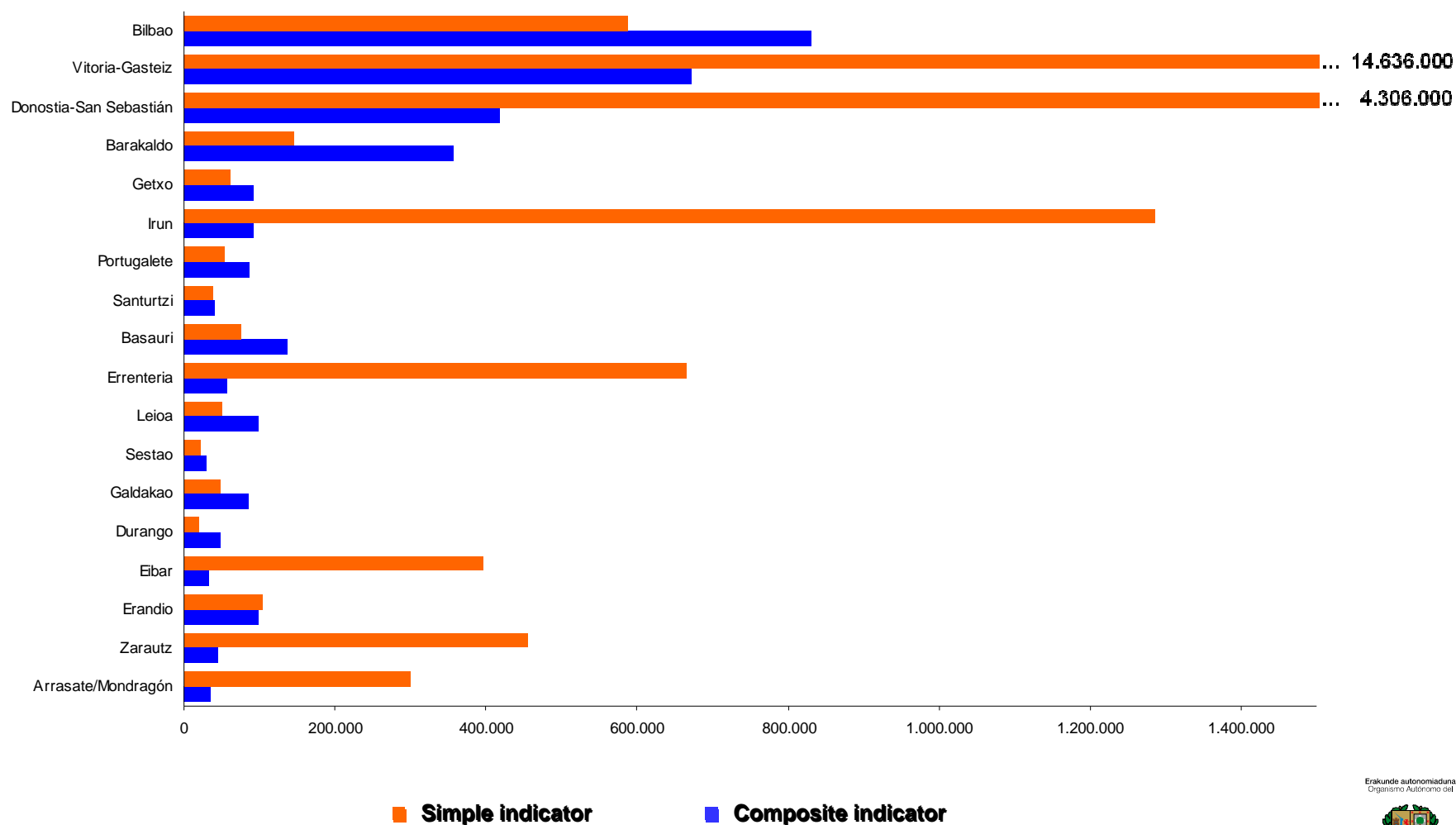


5. Estimation procedure



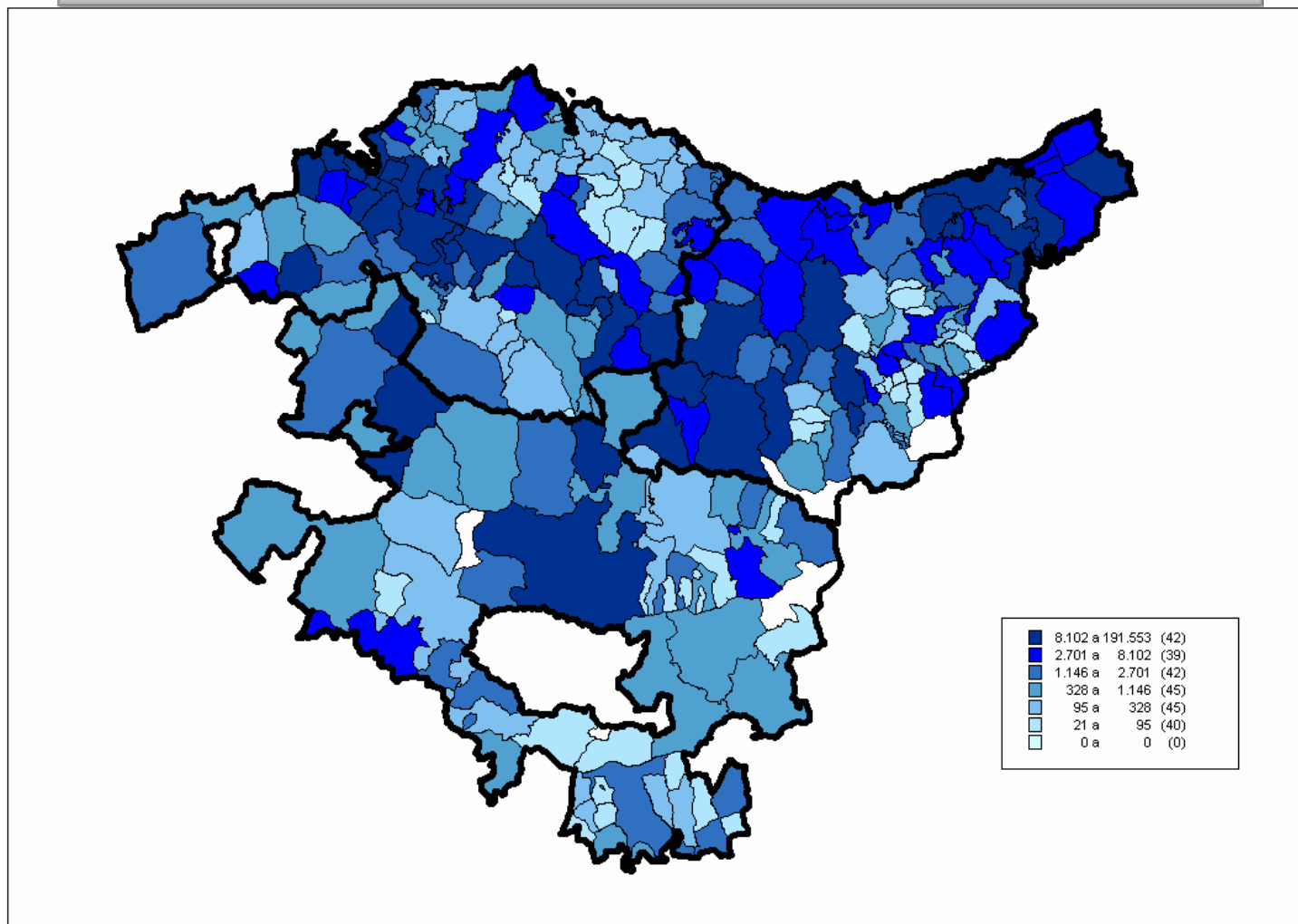
5. Example: construction (45 NACE 93 r1)

Comparison of estimation using simple indicators and composite indicators



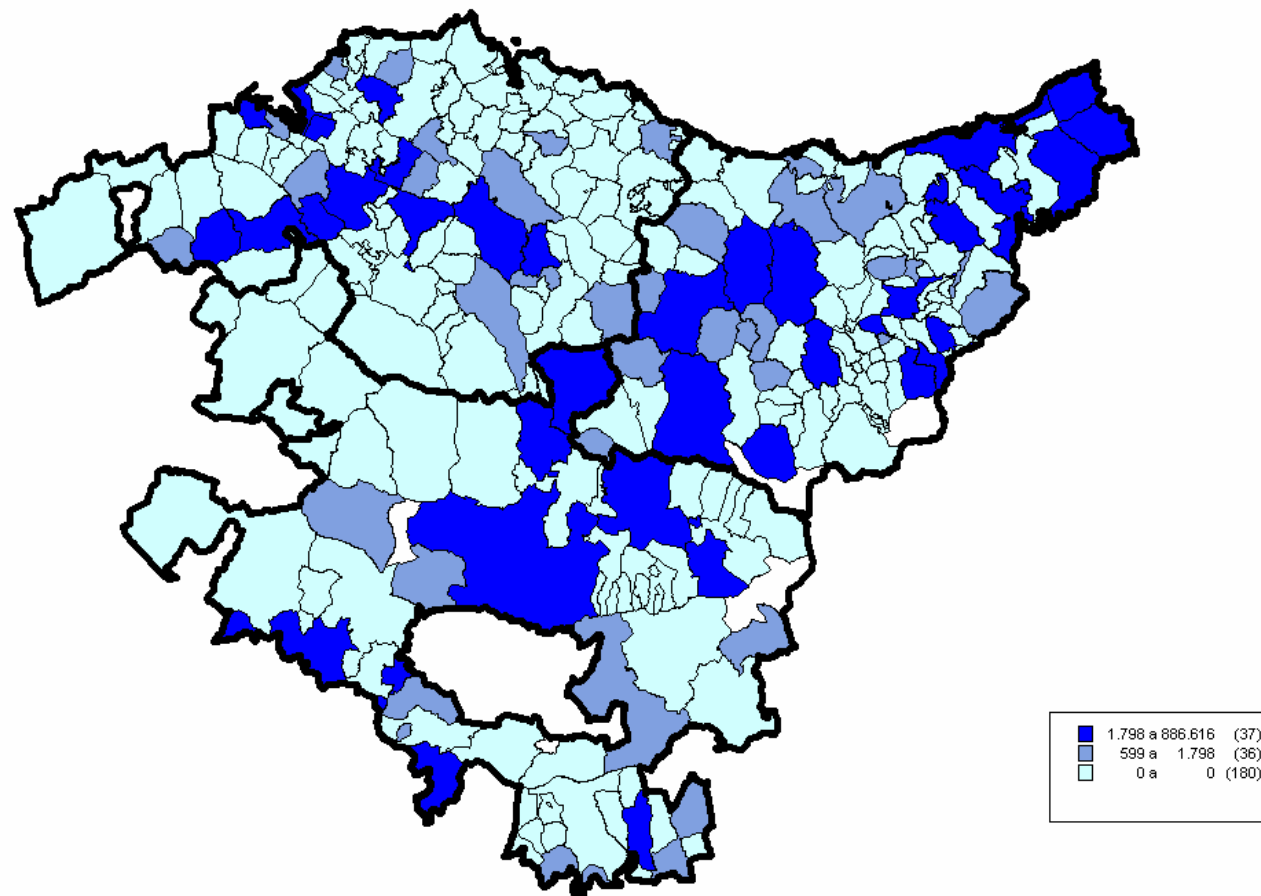
5. Example: electric energy (40.1 NACE 93 r1)

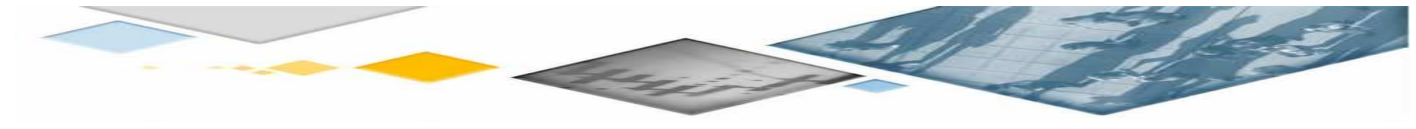
Estimation result by EUSTAT: production & distribution



5. Example: electric energy (40.1 NACE 93 r1)

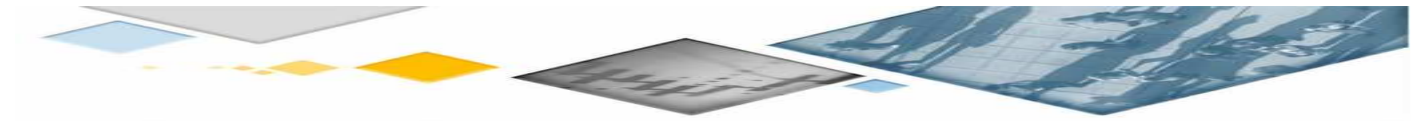
Estimation result: municipal employment NACE 40.1





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6. Future work

→ **YEARLY** Estimation of GDP by municipalities

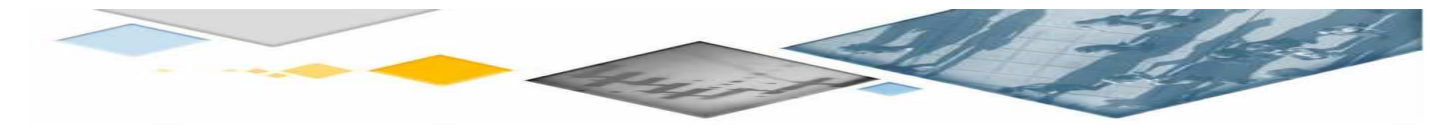
→ Introduction of **NACE 2009**

New classification of branches

Revision of indicators

→ **GREATER DISSAGREGATION**

A21 in municipalities > 10,000 inhabitants



Merci beaucoup !!!

Eskerrik asko !!!

Thank you !!!